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Arab Painting
*Text and Image in
Illustrated Arabic Manuscripts*

Edited by
Anna Contadini

Arab Painting: Text and Image in
Illustrated Arabic Manuscripts

Handbook of Oriental Studies

Section 1, The Near and Middle East

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FOREWORD

The idea of ‘national schools’ in art is one of the founding presumptions of the discipline of art history in the nineteenth century, but it also has deep roots in a geographically and chronologically wide range of practices around the collecting and categorising of images. Whether it is the notion of distinctive regional manners (Huating versus Suzhou) in late Ming China, or Vasari’s classic opposition of Florence to Venice, or the comparisons made in Safavid Iran between the ‘Chinese’ and ‘Frankish’ works collected in the Bahram Mirza album of 1544–5, a wide range of writers have chosen to cluster work under ethnic or linguistic or political labels. They have done so often in conditions of implicit or explicit comparison, which have created some enduring canons and hierarchies of value and subordination. This innovative collection of essays addresses one of the categories, ‘Arab painting’, which perhaps has too often historically been judged to be one of the losers in this art historical practice of ranking. The loss of large quantities of the material, and European ideological presumptions which until recently have constructed ‘Persian’ as the privileged category of aesthetic analysis, have made it harder to maintain focus on the cultural production of the Arab world in the realm of images, texts, and the fruitful range of relationship between them. Perhaps only a multi-authored and cross-disciplinary study, such as the one presented here, can do justice to the complexity and richness of the surviving material, which despite losses is still sufficient to show that the tradition of Arabic manuscripts is a significant part of the story of word and image relationships in the mediaeval period. It is a tradition clearly worthy of the sustained attention it is given here by a range of international scholars, both in its own right, and in terms of the ways in which it broadens and deepens our understanding of the manners whereby pictures and words can operate holistically in a range of cultural and historical contexts. This collection challenges both existing presumptions about the very category ‘Arab painting’, and raises issues around the cultures of text, image and book which will be of ongoing interest to many in a range of disciplines.

Craig Clunas
SOAS, University of London
December 2006

INTRODUCTION

Anna Contadini

This book represents the findings of scholars working from different perspectives on a wide range of Arabic illustrated manuscripts. Their individual scholarly concerns range over the history and transmission of ideas, medieval science, comparative literature and art history, while the manuscripts studied are not only correspondingly varied in subject matter but are also spread both chronologically, from the 10th to the 16th centuries, and geographically, from Western Iran to Spain. But there is nothing random about the resulting collection of papers, for the individual contributions are bound together into a coherent whole by the thematic emphasis suggested by the title. Their concern, accordingly, is neither exclusively with the nature and affiliations of the text in question nor just with the questions of provenance, iconography and stylistic analysis raised by the images that illustrate them. It is, rather, the dynamics of the relationship between the two that is brought centre stage, attention being focused on how they interact and complement each other; and the emphasis on an integrated approach implies, further, that questions of reception as well as of the locus of production need to be addressed.

The book stems, in fact, from an international conference held at the School of Oriental and African Studies on 17–18 September 2004, which I had long dreamt of organizing with the aim of exploring alternatives to the traditionally dominant approaches to illustrated manuscripts in Islamic art history, concentrating especially on the function of image in relation to text. The enthusiastic response to the call for conference papers on this theme clearly showed that it touched a chord, and the quality of the resulting contributions made it immediately clear that there was a need for publishing an edited volume.¹

The resulting book is organized in four sections representing thematic areas that, although in some respects distinct, nevertheless cumulatively contribute to a more rounded understanding of Arabic manuscripts and their illustrations.

The first section is devoted to theoretical issues. It begins with a survey and critique of existing scholarship in which I attempt to trace the ideological background to the emergence of the hitherto dominant approaches to the image in illustrated manuscripts, and to argue that the resulting imbalance has led to

¹ The conference was made possible by a generous award from the Arts and Humanities Research Board (AHRB), supplemented by funding from the Faculty of Arts and Humanities of my own institution, SOAS, the British Academy, the British Research Centre in the Levant and the Khalili Collections. My work as convenor and organizer was greatly helped by the SOAS Conference Centre and by Moya Carey, who was my AHRB research assistant at the time. The conference included other important papers that could not unfortunately be included in the publication, those of Dimitri Gutas, Jeremy Johns, Oya Paçaroğlu and Nikolaj Serikoff. Other scholars and friends who were unable to deliver a paper greatly supported the initiative. The Chairs, Sheila Canby, Bernard O’Kane, John Lowden and Stefan Sperl, deserve the thanks of all who attended the conference, not only for keeping us all to time, but also for participating in discussions with helpful comments and interesting suggestions.

an unjustified undervaluation of early Arab miniature painting. The following article, by Oleg Grabar, problematizes the very term Arab art, and serves as a useful reminder that terminology requires periodic scrutiny in order to reexamine its implications and, as he puts it, to establish (or reestablish) epistemological coherence. A deft survey of the emergence and subsequent evolution of the term leads on to the argument that it is misleading as a scholarly category, despite functioning more or less effectively as one member of a set of crude contrastive labels.

The second section provides representative articles relating to a wide range of scientific texts: works on medicine, botany, zoology, astronomy, and encyclopaedias. The first, by Jaclynne Kerner, deals with the two known illustrated manuscripts of the *Kitāb al-diryāq* which, because of their date and content, are extremely important for the light they shed on early Arab painting. They are also significant with respect to the relationship between text and image, and here the author presents new and useful insights regarding how these manuscripts have been perceived and reexamines their place in the scientific/literary production of manuscripts of the 12th and 13th centuries. Michael Roger's article felicitously combines erudition and lucidity in its exploration of fundamental aspects of the text/illustration relationship, with especial reference to readership and function, as exemplified by the manuscript tradition of Dioscorides' *De Materia Medica* (*khawāṣṣ al-ashjār*). Remke Kruk's article is a learned contribution on the complex zoological textual tradition(s), providing a detailed characterization of the nature of the material, and tracing in detail the degrees of overlap and difference between various sources. The usefulness of its findings will be clear to students of the history of Arabic zoological and medical literature, but the author also raises the important question of why there are so few illustrated copies. With Moya Carey's article we move to astronomy and an analysis of an interesting late 13th-century manuscript of al-Šūfī's *Kitāb suwar al-kawākib al-thābita*, to which is added a useful account of text/image relationships in al-Šūfī manuscripts generally. Persis Berlekamp's article introduces an important unpublished Ilkhanid manuscript of Qazwīnī's *ʿAjāʾib al-makhlūqāt*. Through a discussion of the social geography of the arts of the book it posits a relationship between Iraq and Fars that sheds new light on the transition between 'Arab' and 'Persian' painting.

The third section moves from the scientific to the literary, covering the love story of Bayāḍ and Riyāḍ; various aspects of the *Maqāmāt* manuscripts, including a discussion of the 1237 *Maqāmāt* frontispieces; and the role of captions in literary manuscripts with examples taken from the cycle of *Kalīla wa Dimna*. The first article, however, by Geoffrey King, approaches the text/image interface from a different angle. Exploring a particular byway, it locates a representation occurring in manuscript illustrations (starting with the so-called earliest illustrated manuscript, a fragment in Vienna, and expanding into *Maqāmāt* manuscripts) within a social context that points to shared Muslim and Jewish features of gravestone construction. Cynthia Robinson's article on the Maghribi *Ḥadīth Bayāḍ wa Riyāḍ* manuscript, provides both an illuminating survey of art-historical problems and a probing account of the literary affiliations and social locus of the text in relation to which the nature of the miniature cycle may more surely be assessed. In correlating questions of stylistic affiliation with genre and milieu of production it exemplifies one of the major concerns of the volume as a whole. Robert Hillenbrand's article surveys the problems relating to frontispieces in general, and concentrates on the double frontispiece of the 1237 *Maqāmāt* manuscript. In addition to providing iconographic contextualization, it offers an interpretation of exemplary detail, depth and richness. Finally, Bernard O'Kane's article offers new insights in its exploration of captions, an intriguing and hitherto neglected aspect of the relationship between text and image, calling upon a wide range of examples taken from literary manuscripts, in particular the *Kalīla wa Dimna* and the *Maqāmāt* cycles.

The fourth section reflects the impact of Arab culture on the West. Emilie Savage-Smith's article provides an informative and fascinating insight into an area of representation generally unknown to or ignored by art historians, that of anatomical illustrations in both Middle Eastern and Western manuscripts. Charles Burnett's article is of great value both for the specifics of the information it gives on how translators from Arabic into Latin grappled with visual material and also more generally for its illustration of aspects of the general phenomenon of Arab-Islamic cultural influence in Europe during the period in question, thereby complementing the examination of technical diagrams in Savage-Smith's article.

This book would not have been published without the help of both individuals and institutions. It is my pleasure to acknowledge them here. Thanks are due to: Ünver Rüstem, my research assistant over two years (2005–06), who helped me greatly in the initial stage of editing the articles and assembling the visual material, with zeal and always a smile on his face; Nazanin Mostoufi, who patiently helped during the often finicky final stage of the editing; Mehreen Razvi, who helped with correspondence; the anonymous academic reader, whose sharp and useful comments and suggestions have helped make this a better book; and Craig Clunas, who has generously offered comments and useful insights relating to my own chapter. In particular, my task has been eased by all the authors who have contributed to this volume: not only by enthusiastically answering the call to present their papers but also by patiently responding to editorial queries. To Brill I am grateful for accepting the book in their prestigious *Handbücher der Orientalistik* series, and in particular I should like to thank Trudy Kampervveen, my editor, for her help and patience.

For crucial financial help thanks are due to: the Arts and Humanities Research Board (AHRB); SOAS research funds; the Barakat Trust; and the British Centre for Research in the Levant. Their funding has rendered possible the high level of colour illustration the book contains.

Anna Contadini
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October 2006

SECTION 1

THEORETICAL ISSUES

THE MANUSCRIPT AS A WHOLE

Anna Contadini

The approach of looking at manuscripts only for their pictures or, more simply put, just looking at the pictures, is one that prevailed in Islamic art history for a long time. It was, perhaps, historically inevitable that this should have been so, since the field was long dominated by dealers and collectors, some of whom were on a treasure hunt which resulted in manuscripts being mutilated, their miniatures taken out and sold on the market as separate items. An early instance of this is the case of Heinrich Friedrich von Diez, who, while serving as a Prussian diplomat at the Sublime Porte between 1786 and 1790, amassed from various sources a wealth of Islamic paintings, drawings, and examples of calligraphy. These he subsequently assembled into five albums, three consisting entirely of independent images that, in the process, were divorced from any text which may originally have accompanied them.¹ Diez's approach was followed by numerous others throughout the 19th and 20th centuries, but was not only confined to Middle Eastern manuscripts: rather, it is to be considered as part of a general trend, as Western manuscripts also suffered in the same way. An illustrious case is that of John Ruskin, who cut out illuminations and miniatures from medieval Western manuscripts.²

The result of this sort of activity has been the frequent dispersal of miniatures from the same manuscript in public and private collections all over the world, so that the art historian is confronted with problems that are sometimes insurmountable, and at best still require painstaking and time-consuming study.

The literature on the subject partially reflected this, but also reflected the theoretical approach that Western scholars had in treating this material. An initial given is that Islamic art history has had to be elaborated in the absence of an indigenous theory. This is not, of course, to claim that there are no discussions to be found, say, of aesthetic criteria, but rather that there is no coherent body of work that treats of the nature, purpose or stylistic parameters of artefacts, whether considered synchronically or diachronically. There are a handful of historical texts that record the lives of various esteemed artists or generically trace the development of a particular branch of Islamic painting (more will be said on this presently), and there are also scattered statements about visual beauty in scientific and philosophical works. Among the latter are the *Rasā'il* (Epistles) of the Brethren of Purity (Ikhwān al-Ṣafā'), written in late-10th-century Basra. The fifty-two epistles that make up this encyclopaedic work on the philosophical sciences show the extent to which the Neoplatonic and Pythagorean intellectual traditions had been absorbed. Arguing for the primacy of numerical relationships, the Brethren believed that beauty in art, as in music, resulted from the ability of artists to capture the proportions and harmonies of the

¹ These are the five Diez albums, MSS. Diez. A. Fols. 70–74, now held in the Staatsbibliothek in Berlin. For a recent account on how the albums were compiled, see Roxburgh 1995, esp. p. 115.

² For an account of Ruskin's activities see Watson 2003.

universe, an idea echoed in other writings also.³ But such generalised cosmological propositions cannot really be said to provide answers to specific questions relating to the artistic criteria that underlay, say, miniature painting, and it remains the case that there is next to nothing that clearly elucidates how or indeed if any presumed aesthetic values of the Muslim world were theorised.

Not surprisingly, some modern scholars attempting to investigate Islamic aesthetics have sought to supplement the lack of textual evidence for art by appealing to parallels elsewhere. For example, Arabic poetry and poetics have been considered a potential source of insights into the sort of aesthetic criteria that may have been historically valid in the Middle East, and it has been argued that analogous qualities may be detected in the visual arts, thus confirming the existence of an Islamic conceptualisation of aesthetics, even in the absence of a theory proper.⁴ But comparisons between poetry and art, although supported to some extent by medieval Arabic sources,⁵ offer only general analogies, and it is difficult to argue that there is any meaningful correlation between the techniques of verbal and visual representation.⁶

Another way in which modern scholars have sought to explicate a theory of Islamic aesthetics is by arguing for a religious interpretation of the material in some ways akin to that associated with the *Ikhwān*. This approach presents Islamic art as a conscious effort on the part of its makers and patrons to move the viewer towards the contemplation of Divine Order, principally through geometric designs and patterns that, we are told, symbolise the workings and structure of God's creation.⁷ As regards

painting, the general lack of three dimensionality and perspective in the Islamic tradition is considered in this specific framework to be a manifestation of a peculiarly Islamic concern for geometry, which evokes a reality more profound than the merely material verisimilitude that is achieved by Western naturalism.⁸ An interesting anecdote in this regard was included by Titus Burckhardt in his book on Fez, where he records an encounter with a craftsman of that city. When asked how he would choose to ornament an area of wall, Burckhardt responded, he tells us, by proposing an arabesque scroll inhabited by animals, to which the Moroccan responded:

No... that would not be worth much. Birds, horses, weasels and other quadrupeds are to be found everywhere. One only has to look around and imitate. That requires no knowledge. But if I say to you, deploy four rosettes (*tasāṭir*) beginning alternately in an eight-ray and in a ten-ray star, so that side by side, and leaving no spaces, they fill the entire wall, that would be a different matter. And that is art!⁹

But while this anecdote is valuable insofar as it records the opinions of a practitioner from the culture, its implications for a theory of Islamic art are by no means clear cut: if 'art' translates *fann*, the reference might rather be primarily to skill in problem-solving. Further, even accepting that 'worth' here is a term of aesthetic valuation, and that comparisons of this kind find favour with many Muslims today, to accept such an aesthetic theory as valid for the entirety of Islamic artistic production is highly problematic, especially given the lack of any substantiating historical sources.

³ See Bausani 1978; and for a discussion of the ideas they contain relevant to the aesthetic debate see Necipoğlu 1995, pp. 185–196.

⁴ See Kahwaji 1971; Behrens-Abouseif 1999 and Gonzales 2001.

⁵ For a discussion of medieval authors see Behrens-Abouseif 1999 and Gonzales 2001.

⁶ To take just one example, that of female beauty, we may certainly find in what is perhaps the most celebrated descriptive passage, that in the *mu'allāqa* of Imru' al-Qays, an anatomy consisting of cascading similes and metaphors that conjure up visual images, but these can hardly be considered analogous to a single visual representation (unless, perhaps, one by Salvador Dalí!). For a translation of the *mu'allāqa* see Bateson 1970, pp. 138–9.

⁷ Among the literature arguing for or reflecting such interpretations are Critchlow 1976; Aul in Riyadh 1985,

pp. 13–17; El-Said 1993; 'Ali 1998, esp. pp. 31, 36–38, 42–43. Whereas Necipoğlu 1995, pp. 74–83, Behrens-Abouseif 1999, pp. 118–120, 131–33, and Leaman 2004, esp. pp. 12–14, 66–69 argue against such views, urging against an over-interpretative approach and suggesting that Islamic geometric patterns and designs may well have been deployed and appreciated primarily for their beauty. However, Necipoğlu believes that a semiotic reading which endows geometric ornament and forms with meanings relevant to their respective milieus is valid: Necipoğlu 1995, pp. 91–123, 217–23. Gonzales reads certain sources as clear examples of Medieval aesthetic thinking, one that will also influence European thought: Gonzales 2001 (see also her useful bibliography for further readings). The most comprehensive treatment of the source material is to be found in Puerta Vilchez 1997.

⁸ Critchlow 1976, p. 8; 'Ali 1998, pp. 31, 36–38.

⁹ Burckhardt 1992, p. 95.

To be sure, the importance of geometry in the Islamic artistic tradition cannot be denied. Abbasid Baghdad of the 9th and 10th centuries was marked by the development and popularisation of the mathematical sciences, and at the same time by the rise and proliferation of a geometrical decorative mode in the arts, a trend that was to continue and climax during the so-called Sunni Revival of the 11th and 12th centuries, affecting much of the Muslim world, albeit with marked regional differences. It has been argued that these simultaneous intellectual and artistic developments may have been related, reflecting an ethos that sought to explore and emulate the perfect order of God's universe.¹⁰ Contemporary writings such as the *Rasā'il* emphasize the importance of harmonious proportions that can be expressed as numerical relationships reflecting the divinely ordered structure of the cosmos. These relationships underpin music and the visual arts, through which the soul is drawn to a realization of, and a longing for, a higher spiritual reality. However, such views spring very much from a Neoplatonic tradition common to both East and West and cannot be said to support the belief that the entirety of Islamic art is governed by a distinctly Muslim, religiously-inspired taste that prefers geometrical ornament to other forms of design, and still less the argument that such a preference led to a deliberate tendency towards stylisation in figurative representation. Indeed, as will become apparent below, what little in the way of aesthetic theory relating to miniature painting can be gleaned from the historical sources contrasts strikingly with this notion of geometric preference.

In fact, the desire to determine an explicitly Islamic framework within which to understand the material is a fairly new one, and it certainly had no place in the work of the exclusively Western scholars who, beginning in the late-19th century, were the first to establish Islamic art history as a discipline. Given this origin, the subject was inevitably based on Western models, and it is therefore no surprise to find that the trajectory it has followed, from its early attempts to characterize styles, arrive at chronologies, and ascertain iconographical affiliations, to its more recent attempts at contextualization and the problematiza-

tion of methodologies, should follow that traced earlier by Western art history.

An important consequence of the Western genesis of Islamic art history has been, until relatively recently, an emphasis on a notion of historical evolution akin to the Vasarian concept of artistic development. Here the classic paradigm is the shift from Medieval to Renaissance painting, long perceived as a dynamic phenomenon in which earlier models were superseded by works whose decisive virtues were the use of perspective, greater figural naturalism, and increased formal complexity, all of which were considered advances. These attributes, whether employed singly or combined, were seen to enable both the production of aesthetically pleasing compositions of considerable subtlety and technical virtuosity, and the creation of great psychological depth in the portrayal of events and personalities. The influence of this model has meant the imposition of a comparable scale of values on Islamic material, promoting the merits of, say, miniature painting of the Safavid period not merely intrinsically but comparatively, to the detriment of the output of earlier periods. This approach resulted in the selection of a spread of isolated pictures arranged chronologically to give an idea of stylistic development.

As an early, famous example of this type of scholarship one may cite F. R. Martin, *The Miniature Painting and Painters of Persia, India and Turkey from the 8th to the 18th Century*, 2 vols. (London, 1912),¹¹ and although now increasingly being questioned, the evolutionary perspective it adopts is still to be found in recent publications that select and order pictures according to aesthetic criteria derived from Western art history. With regard to the focus of the present volume, it is interesting to note the lack of any reference to the Arab world in Martin's title, particularly since the chapter he devotes to the Fatimids and Abbasids surpasses in length the sections on both Indian and Turkish material. The reason for this omission is of its time: the Arabs were a 'simple race, without great artistic feeling or interests', and the artists who worked for them were predominantly Christians.¹² Under the Fatimids he discerns an artistic revival

¹⁰ For a full discussion of this topic, see Necipoğlu 1995, esp. pp. 91–123; and Tabbaa 2001.

¹¹ See Martin 1912. For a discussion on Martin's approach, see also Vernot 2000, pp. 35–36.

¹² Martin 1912, p. 1.

orchestrated by the Copts, and suggests that once the dynasty fell, Egypt's artists (presumably still Copts) spread throughout the Islamic world 'diffusing their skill'.¹³ The painting produced under the Fatimids and Abbasids Martin judges to be superior to its Byzantine and Western counterparts,¹⁴ but by seeing Muslim Arabs primarily as patrons and denying them any significant creative role they can both be rendered invisible in his title and offered up to art-historical scholarship as little more than custodians of a transitional phenomenon. Smoothly inserted into an evolutionary paradigm, Arab art could be classed as an unoriginal prolongation of earlier iconographical traditions the function of which was to serve as a springboard for later developments.

To be sure, the idea of a progressive development is not entirely alien to the Islamic tradition, for hints of it can be found in those (relatively few) Islamic art-historical writings to which reference was made above. These take the form of prefaces or treatises on the arts of the book that contain sections on painting.¹⁵ Although the majority of surviving examples were produced in Safavid Iran and are concerned mainly with Persian artists,¹⁶ their rather standardised nature suggests that there was a fairly extensive and long-standing tradition of such writing in the Islamic world: we certainly know of the existence of much earlier Arabic treatises on calligraphy.¹⁷ Most of the surviving examples contain chronologically arranged biographies, and although most deal with the history of calligraphy, some also contain sections on miniature painters. Perhaps the most famous of these works is the preface written by the artist Dūst Muḥammad in the album of calligraphy and painting that he prepared in 1544 for Bahrām Gūr, brother of the Safavid Shah Ṭahmāsp.¹⁸ After presenting an apologia for the painting of figural imagery and sketching a cursory history of early portraiture, Dūst

Muḥammad describes the principal painters of the Persian tradition, starting with Aḥmad Mūsā, who worked at the time of the Ilkhanid ruler Abū Saʿīd (r. 1317–35) and who is famously credited with having 'lifted the veil from the face of depiction'.¹⁹ The enumeration of artists that follows is couched in florid hyperbole and culminates in the late Timurid/early Safavid painter Bihzād, who is 'beyond all description'.²⁰ Although not quite Michelangelo to Aḥmad Mūsā's Giotto, Bihzād is certainly presented in a manner that suggests that he is the fulfilment of a line of artistic development. But quite what the determining values of this development were is difficult to tell, since Dūst Muḥammad offers almost nothing in the way of real aesthetic criticism or evaluation. Another important source of this type is the treatise on painters and calligraphers written around the turn of the 17th century by the Iranian scholar Qāḍī Aḥmad.²¹ Like Dūst Muḥammad before him, Qāḍī Aḥmad enthusiastically eulogises a role-call of Iranian painters, with Bihzād considered to be the greatest among them. He, unlike Burckhardt's craftsman from Fez, holds verisimilitude to be one of the key achievements of painting, and indeed goes so far as to credit painters with an almost divine power to 'conjure up to life the likeness of everyone' and in so doing furnish 'a guide to the plan of the universe'.²² It is interesting to note that we thus find here clear evidence to counter the view, mentioned above, of those modern scholars who assert that it was by the conscious *avoidance* of naturalism that Islamic painters sought to evoke cosmic order.

A similar appraisal of portraiture is given in the *Qānūn al-ṣuwar*, a treatise on painting written by the Safavid artist Ṣādiq Beg or Ṣādiqī some time between 1576 and 1602.²³ On his master, Muẓaffār-ʿAlī, Ṣādiqī writes that:

When minded to portray a certain person (*tīmṣāl-i kaṣī*), his creative imagination (*khiyāl*) could penetrate to the inner man beneath. And none could truly distinguish

¹³ Martin 1912, pp. 3–4, 6–7.

¹⁴ Martin 1912, pp. 13–15.

¹⁵ For translations and discussions of these texts, see Minorsky 1959; Dickson and Welch 1981, pp. 259–69; Thackston 1989, pp. 335–62; Grabar 2000b, pp. 22–35; Roxburgh 2001; and Thackston 2001, pp. 3–42.

¹⁶ For enumerations of the extant texts, see Grabar 2000b, pp. 22–25; and Roxburgh 2001, pp. 3–4.

¹⁷ B. N. Zakhoder in Minorsky 1959, pp. 17–18.

¹⁸ See the translation in Thackston 1989, pp. 335–50, esp. pp. 343–47, 348–49 and in Thackston 2001, pp. 4–17, esp. pp. 11–15, 16.

¹⁹ Dūst Muḥammad in Thackston 1989, p. 345 and in Thackston 2001, p. 12.

²⁰ Dūst Muḥammad in Thackston 1989, p. 347 and in Thackston 2001, p. 15.

²¹ See the translation by Minorsky 1959.

²² Qāḍī Aḥmad in Minorsky 1959, pp. 178–79.

²³ See the translation in Dickson and Welch 1981, pp. 259–69.

between original and likeness unless, perhaps, purely physical considerations of motion were invoked.²⁴

He then goes on to say that those who ‘incline towards figural painting’ should ‘let Mother nature alone (*āfarīnīsh*)’ serve as their guide.²⁵

Presumably, then, naturalism and even insight into character were aesthetic criteria in the circle in which these men of the arts were writing, although one should not, of course, equate this Safavid conception with the Western idea of naturalism/realism, for much of what these artist-authors say on painting’s ability to capture likenesses is anecdotal and hyperbolic in character, and is undermined by other passages in the same texts which would appear to promote the artist’s free use of imagination. It is, moreover, evident that Safavid painting remained distinctly stylised in terms of figural representation and so cannot reasonably be compared in intent to the European mimetic tradition. Nevertheless, the writers of these texts clearly believed that their art captured at least something of the real world, and the framework within which they worked was certainly far from being governed by the sorts of anti-naturalistic, geometricising attitudes that have in modern times been ascribed to Islamic painters.

But even accepting that such writings as those by Dūst Muḥammad and Qāḍī Aḥmad might appear to imply something akin to the Vasarian model for the study of Islamic painting, it must be borne in mind that they were produced mainly in Safavid Iran and deal almost exclusively with the Persian tradition. They cannot, therefore, be treated as authoritative or comprehensive in relation to the history of Islamic painting in general. Further, the evolutionary approach they adumbrate is nowhere near as pronounced or explicit as it is in Western scholarship. In particular, although naturalism is clearly presented as an admired quality, it is never treated as it is in traditional European art history as an absolute goal towards which painters have progressed. And thirdly and most importantly, painting is dealt with in these texts as just one branch of the arts of the book, alongside calligraphy, illumination, and bookbinding, an approach that contrasts sharply with the Vasarian privileging of representational art. Thus while it is

true that the prefaces and treatises have long been cited by Western scholars in support of their construction of a canonical developmental narrative for Islamic painting,²⁶ they could have provided neither sufficient impetus nor the model for the direction that the study of the field has traditionally taken.

A further specifically Western factor that contributed to the construction of an evolutionary narrative was the interpretation of the history of European miniatures associated especially with Weitzmann. This proposes that miniature paintings become more and more independent of the text, a view that has been taken up by scholars of Islamic material. Weitzmann’s well-crafted and in many ways convincing argument, formulated in his *Illustrations in Roll and Codex* of 1947,²⁷ has it that miniature paintings began life in ancient papyrus scrolls as small-scale illustrations within the columns of text, not distinguished by any sort of border or background, and strictly ‘subordinated to the writing.’²⁸ But after the rise of the vellum codex from the second century onwards, paintings became ever more ambitious: artists took advantage of the new format to execute works of greater size and complexity, adding borders and backgrounds and, if visual impact so required, moving them away from the immediate vicinity of the text that they accompanied. This development is one that in Weitzmann’s opinion constitutes the freeing of the picture, as if it had previously been the slave of the text—indeed, the chapter in question is entitled ‘The Emancipation of the Miniature’. It culminates in the establishment of the full-page illustrative miniature (as distinct from frontispiece paintings, which had long been of this format).²⁹ Moreover, it is a shift that he presents in unequivocally positive terms as the realisation of some sort of irresistible artistic impulse, the miniature becoming ‘more and more independent of the text until it reached perfection as a picture which occupies the entire page.’³⁰

²⁶ Dūst Muḥammad’s preface, for example, was published in Binyon, Wilkinson, and Gray 1933, appendix 1. For further discussion on this topic, see Roxburgh 2001, pp. 6, 162.

²⁷ Weitzmann 1947. For Kurt Weitzmann and the role of Princeton in this type of scholarship, see Grabar 2001, p. 1.

²⁸ Weitzmann 1947, p. 52.

²⁹ Weitzmann 1947, pp. 69–112.

³⁰ Weitzmann 1947, p. 83.

²⁴ Šādiqī in Dickson and Welch 1981, p. 261.

²⁵ Šādiqī in Dickson and Welch 1981, p. 264.

Weitzmann can also be seen as promoting the view that text and image ultimately grew separate from one another, this being the basis for the evolution of fine art in the Western world.

The changes in typology and approach that Weitzmann traces certainly took place, but the conclusions that he draws from them are highly problematic. It would not be too great a stretch of his logic to arrive at the view that miniature paintings developed into entirely independent entities that had no further need of an accompanying text. That they are to be found in scripted books thus becomes almost incidental, and they may just as well be viewed in isolation, ignoring their book context. This inference cannot but have strengthened the temptation to regard the development of Islamic miniature painting as a parallel phenomenon, with earlier and clearly text-related but less interesting paintings being followed by larger, more independent and complex paintings of greater aesthetic interest, an evolution that would go some way to justify studying (and appreciating) them without reference to their texts.

There are three main reasons for rejecting such an outcome. The first is quite general and straightforward: miniature paintings may certainly be enjoyed and appreciated independently of the texts to which they relate, but the point of art-historical study is to deepen that appreciation through arriving at a better understanding of their cultural context, of their production, function and, where possible, reception; and in pursuing this goal, the relationship of image to text cannot be ignored. The second is that the evolution of Islamic miniature painting cannot be reduced to a small to large, simple to complex, subservient to independent trajectory. Although it is true that grand pictures are found in, say, Safavid manuscripts, large-format illustrations that dominate and even fill the entire page can also be seen in some of the earliest surviving Arabic manuscripts, a notable instance being the famous copy of the *Maqāmāt* dated 1237 and illustrated by al-Wāsiṭī. Indeed, not only are the miniatures of this and other early manuscripts often larger than those of subsequent ages, but they can also be said to be more monumental: later Persian paintings, with their profusion of small-scale detail, evince a trend towards miniaturisation, even if the images themselves may be of considerable dimensions. Weitzmann's conclusions cannot, therefore, be readily applied to the Islamic tradition, which did not

undergo a clear-cut, linear development. The third reason is simply that Weitzmann's conclusions are not wholly convincing in relation to the European tradition itself. Even accepting (and applying cross-culturally) the notion of 'emancipation', miniatures—both Eastern and Western—still remained illustrations in a book primarily composed of text. The progressive enlargement, monumentalization, and displacement of pictures may, where it occurred, be seen as the result of a search for new formulae and approaches to the illustration of text rather than as a conscious effort to 'free' the images. And while these changes may have rendered the relationship between word and image subtler and more complex, they did not by any means sever it or deprive it of relevance.

It is clear, then, that the evolutionary conceptual framework hitherto applied to Islamic painting derives straightforwardly from the fundamentally Eurocentric bias of most scholarship, and cannot be said to be representative of what little we know about contemporary indigenous attitudes. However, this is not to say that European art history offered no adequate methodological means for the study of Islamic material. From the evolutionary approach would naturally emerge a concern with techniques, stylistic affiliations and iconographical derivations, but allied to this was the development of a second trend in scholarship, one concerned with biography, authorship, and the modalities of production. This would no doubt have emerged under the pressure of the perennial needs of the market for authentication of provenance and the detection of forgery, but it was in any case a natural consequence of scholarly curiosity and the research that inevitably followed into the lives of painters, their methods of working and, broadly, the social contexts in which they operated. But in addition to questions of patronage and the economics of production, it engaged, importantly, with the intellectual environment, thereby having a crucial impact upon interpretation, which increasingly had to abandon hermetic reflections on ineffable achievements of form and painterly technique in an autonomous object and encompass aspects of contemporary culture and belief that bore upon both production and reception, and in particular to take account of complex referential systems pointing to layers of associations and symbolic meanings. Paintings, in short, required not just appreciation but decoding.

This was all the more true when attention was directed away from the Renaissance towards medieval material. One might cite in this regard the research on Western medieval manuscripts fostered by the Warburg Institute, the Courtauld Institute, and Princeton University, which have for some time sought to integrate the study of iconography within a wider examination of textual transmission, an approach that requires an understanding of the relationship between what survived of medieval allegorical strategies of interpretation, the burgeoning world of humanist scholarship, and the classical tradition.³¹ An interesting example is that of Fritz Saxl (1890–1948) who, after serving as Aby Warburg's research assistant and librarian, became director of the Institute in 1929, five years before its move from Hamburg to London. Saxl inherited from Warburg an interdisciplinary approach in which Islamic art was considered a valid field of study, and it was a topic that he himself took up in some of his writings. In one essay, for instance, he demonstrated that Arabic descriptions of Sabian divinities from Harran provided the basis for astrological images on both Islamic metalwork and on Giotto's Campanile in Florence.³² Among modern representatives of this methodology, one might pick out the volume of articles edited by Stephen G. Nichols and S. Wenzel and aptly entitled *The Whole Book*.³³ In particular, Nichols' own essay, which examines a late-13th-century *chansonnier*, exemplifies the integrated approach to illustrated manuscripts, noting as it does that the distribution and choice of miniatures in this codex not only reinforce the organisation of the book but also convey key messages in conjunction with the text; 'in consequence', Nichols writes, 'the visual art cannot be dismissed as simply decorative or adventitious.'³⁴

A similar stance is taken by Daniel H. Weiss in his assessment of the Arsenal Old Testament,³⁵

an illustrated French translation produced in the Crusader kingdom of Acre during the second half of the 13th century. Noting that the text of this bible is selectively and idiosyncratically abridged in order to promote the themes of kingship and holy warfare, Weiss demonstrates that the book's pictorial cycle has also been formulated with these ideas in mind, so that 'text and images must be seen as complementary expressions of a highly specific, even personalized, conception.'³⁶ Even very specific topics can benefit from this new approach, as witness Michael Camille's study of marginalia in Medieval art,³⁷ which, 'rather than looking at the meaning of specific motifs', instead focuses 'on their function as part of the whole page, text, object or space in which they are anchored.'³⁸

As a final example, it would be appropriate to mention the study by Robert S. Nelson, a student of Weitzmann, on prefaces in Byzantine Gospel books and their associated miniatures.³⁹ In his assessment of this little-known topic Nelson never loses sight of the interrelationship of text and image, stating in the introduction his aim to 'define the genesis, evolution, and dissolution of that association.'⁴⁰ As this quote suggests, Nelson's discussion does trace a growing divergence between the miniatures and the texts that they accompany, but this does not lead him to abandon his integrated approach or to argue, as Weitzmann had, that manuscript illustrations somehow outgrew their book context.

Traditional scholarship on early Islamic miniature painting has hitherto failed to develop a similarly balanced view:⁴¹ the miniatures have either been regarded as subservient to the text they illustrate or have been foregrounded and studied in isolation from it. In the latter case, for the reasons given above, attention has been focused especially on late miniatures and, in particular, on Persian and Indian examples. As such paintings often illustrate literary works with a strongly defined narrative, whether heroic, as with the *Shāhnāma*, or romantic, as with

³¹ This new iconographic approach was in many cases advanced by émigré German Jews, for which see Hillenbrand 2000, pp. 175–77.

³² Saxl 1912. For Fritz Saxl and the Warburg Institute's contribution to scholarship in iconography, see Vernot 2000, p. 46.

³³ Nichols and Wenzel 1996. See esp. the introduction, pp. 1–6; and the essays Huot 1996 and Nichols 1996.

³⁴ Nichols 1996, p. 91.

³⁵ Weiss 1998, pp. 81–195.

³⁶ Weiss 1998, p. 113.

³⁷ Camille 1992.

³⁸ Camille 1992, p. 9.

³⁹ Nelson 1980.

⁴⁰ Nelson 1980, p. 4.

⁴¹ As observed in relation to Persian painting by Grabar 2000b, p. 12.

Nizāmī, scholars have certainly attended to their subject matter and the ways in which they exemplify the related passages of the text, but there has still been a concentration on content at the expense of context and a disregard of the fact that many such paintings are best understood not in isolation but as functioning as part of an integrated, text-based series, within which they interact with those that precede and follow them.

The situation is even worse with regard to non-literary manuscripts. Their miniatures have not been perceived to be intrinsically interesting to the extent that they might justify individual attention, and their relationship to the text, which was often expository and baldly factual rather than dramatic and imaginative, did not seem to demand the same urgent attention. Yet that relationship is just as intimate, and is often more direct, so that it can justifiably be claimed that previous studies have failed to grasp the essentially integrated nature of such manuscripts.

A pioneering step towards redressing this imbalance occurred with the publication of Ettinghausen's great book, *Arab Painting*, in 1962.⁴² Set against the two trends in Western art history noted above, Ettinghausen's seminal work can be seen to be alert to some of the problems investigated by the second, contextual trend, but ultimately not to transcend restrictions imposed by the first, evolutionary one. This assessment, it should be emphasized, is not meant to detract in any way from the significance of his achievement: *Arab Painting* is still indispensable, and will long remain so. Nevertheless, one only has to consider the central concept of maturation followed by decline⁴³ to see how much its approach has been coloured by traditional Western evolutionary attitudes. The concept of the autonomous work of art also inevitably affects the nature of his aesthetic pronouncements and the kinds of analysis he offers. A good example of his evaluative language occurs in his discussion of the al-Mubashshir finispieces, in the course of which he speaks of 'inner drama', 'plastic quality', and the artist's 'power to imbue them with life, even with vibrant energy'.⁴⁴ A further basic characteristic that betrays the same disciplinary

origins and its associated limitations is the lack of any concern for the relationship of the illustrations to their text. Text/image relationships are simply ignored, and it is symptomatic that the images to which most attention is devoted are those that are extraneous to the semantic core of the text, although highly relevant to the social purposes and status of the book, namely the frontispieces, where variations on the representation of power relations allow art-historical affiliations to be posited and iconographical derivations traced, thus stressing the general at the expense of the particular. When attention is turned to the miniatures that illustrate the text and are embedded within it, the productive potential of their juxtaposition is not considered: attention is fundamentally restricted to relationships between paintings, and even then not within the single manuscript, as a possibly coherent cycle with a potentially cumulative impact, but as material from which may be extracted stylistic groupings providing linkages over space and time. Intertextuality, in short, is restricted to the visual domain, and concerns less interpretative enrichment than derivational categorization.

Only in the last couple of decades has a decidedly new approach finally started to emerge.⁴⁵ Not surprisingly, perhaps, it is in the study of Persian painting that some of the most significant steps in this regard have been taken. The illustrations of the *Shāhnāma* have benefited particularly from this new approach, with scholars paying far more attention than before to the relationship between image and text in both the genre as a whole and in specific manuscripts.⁴⁶ For instance, it has been demonstrated that a *Shāhnāma* miniature will typically illustrate the verse or verses directly preceding it, and this concern for the alignment of image and text may well explain the frequent occurrence of stepped miniature formats in manuscripts of the 14th century onwards.⁴⁷

⁴² For the importance of Ettinghausen's approach, see Hillenbrand 2000 and Vernoit 2000, pp. 46–47.

⁴³ Pp. 97, 100 and 142.

⁴⁴ P. 78.

⁴⁵ Grabar and Robinson 2001. See especially in this volume Grabar 2001, which concisely outlines the importance of considering Islamic painting in the wider context of the book. This new approach is also advanced in Grabar 2000b, pp. 11–13, and applied to productive effect in Roxburgh 2003 and Hoffman 2003.

⁴⁶ These developments are summarized and discussed in Shreve Simpson 2004.

⁴⁷ Shreve Simpson 2004, pp. 15–16, citing F. Mehran, 'Frequency Distribution of Illustrated Scenes in Persian Manuscripts', *Student*, vol. 2, 1998, pp. 351–79, which I have not been able to consult.

In other media also we may find extremely subtle and playful connections between text and image. A case in point is the Ayyubid enamelled beaker known as the Palmer Cup, on which the frieze of figures and the poetic inscription that runs above them relate in a palpably meaningful way to one another⁴⁸ (Fig. 1). The inscription comprises two separate bacchic verses, the longer one, which refers to a beardless youth (*aghyad*) holding a cup while music is played, running above an enthroned ruler and the attendants and musicians who flank him. It is surely no coincidence that the word *aghyad* is placed directly over the princely figure, who is indeed clean-shaven, nor that this figure's hand is in the attitude of holding a cup. But no actual cup is depicted, so that the vessel upon which the text and imagery are painted would appear to fill this role. The truncated verse that makes up the second part of the inscription may be even more allusive, possibly referring to the figure holding a mace who is positioned directly opposite the seated ruler. The carefully crafted interweaving of text, image, and object presented here should alert us to the resonances possibly to be found in manuscripts, and thence to the importance of approaching illustrated Islamic books as potentially complex integrated entities.

To return to the *Shāhnāma*, specific copies have also been the object of this new, holistic approach, as exemplified by Robert Hillenbrand's assessment of the famous manuscript made for Shah Ṭahmāsp: the *Shāhnāma-yi Shāhī*.⁴⁹ While he does not explicitly relate text to image, Hillenbrand examines its 258 miniatures as a programmatic whole rather than as individual 'masterpieces',⁵⁰ paying particular attention to which parts of the narrative have been chosen for illustration and what these choices might tell us. In so doing, he demonstrates that the distribution and subject matter of the illustrations render this a *Shāhnāma* that is 'devoted to a quite exceptional extent to war', and specifically to the ancient conflict between Iran and Turan. True, this is the central theme of Firdawsī's text, but whereas other illustrated copies depict its more fantastic and romantic episodes

in addition to those relating to battle, the *Shāhnāma-yi Shāhī*'s paintings are uniquely and distinctively focused on warfare. This emphasis, Hillenbrand argues, is a direct reflection of Ṭahmāsp's struggles against the Uzbek and Ottoman Turks at the time of the book's production. Previously admired as individual wonders of art, the illustrations of Ṭahmāsp's *Shāhnāma* are thus at last being considered in relation to a context of production that helps refine our interpretation of them, in the same way that the French Bible discussed above was studied.

For a final illustration we may turn from a *Shāhnāma* recognized as containing masterpieces of Safavid art to one of the Arab manuscripts that lie at the core of the present work. The *Kitāb na'ī al-ḥayawān* in the British Museum, derived mainly from the Ibn Bakhṭūshū' tradition of books on animals, contains descriptions and depictions of various animals, real and imaginary, accompanied in nearly every case by a miniature painting (Figs. 2, 3). These relate to the text in the most obvious of ways, illustrating the animals under discussion. As in the case of the *Shāhnāma*, they place the miniature within the relevant segment of text; and from a zoological point of view in some cases the miniature also depends upon it, for given that the representations are stylized recourse must on occasion be had to the text in order to determine the species in question. But the relationship is more than that of a dominant text to a functionally subordinate appendage, for accepting that the manuscript is an evidently purposeful combination of the two elements, the miniatures are not just a reflection of the verbal content but a visual (and pleasurable) counterpoint to it. The two intertwine to form a composite whole, the manuscript, that transcends the sum of its parts. It would thus do violence to the miniatures to divorce them from it and study them in isolation, for they are more than just insertions within the text: they supplement it by providing a complex parallel, in their continuing variations on particular representational and formal devices, to the formulaic organization of the text.

Further, as we have seen in relation to *Shāhnāma* miniatures, their positioning within it is usually carefully contrived, a case in point being the bustard: the miniature of two birds, one flying over the other, is placed exactly at the point where the text informs us that it uses excrement as a defence against other birds while flying (Fig. 3). Further, on the occasions where

⁴⁸ For a detailed discussion of the Cup, its inscriptions, iconographical cycle and the interplay between the text and imagery see Contadini 1998.

⁴⁹ Hillenbrand 1996.

⁵⁰ Hillenbrand 1996, p. 66. See also Soucek 2003.

the text departs from its standard pattern to launch into a more extended narrative, the miniatures keep pace. The account of the unicorn, for example,⁵¹ contains two miniatures, one generic, the other specific, and only by relating them to the narrative can the difference be accounted for. The first, of a quadruped with no horn, precedes the text, which begins with a comparison with a known animal and leaves mention of the horn till later. In the second it is equipped with wings as well as its horn, reflecting the narrative shift towards the fantastic (Fig. 5). Recalling the punning complexity of the visual and textual interaction on the Palmer cup, we may also note that the lines of text framing this second miniature both begin with *šūra* (image), and that the text refers to images that, it is said, are to be found in the horn after it is split.⁵²

It might be objected that this line of argument fails to take account of the phenomenon of albums. Specifically, in Iran from the early 15th century there began the practice later taken up in Ottoman Turkey and Mughal India of creating albums of calligraphy, painting and drawing with many of the images being without any accompanying text.⁵³ These, it could be claimed, do provide evidence from the Islamic world itself for the progressive freeing of miniature paintings from their textual bonds. It is true that the whole into which the individual items have been incorporated sometimes includes a preface which usually relates in some manner to the choice of pictures,⁵⁴ but this does not weaken the claim, for the relationship between text and image in such instances is surely of a very different order from that of illustrated manuscripts, the preface being not an antecedent

basis for the pictures but a posterior accompaniment to them. Further, some albums contain paintings that have evidently been taken from a pre-existing manuscript with a text, from which they are now largely severed. In her eloquent assessment of the fragments of the 14th-century *Kalīla wa Dimna* that were remounted in an album made for the Safavid Shah Tahmāsp around 1560, Jill Cowen writes that ‘the Safavids considered paintings the *raison d’être* of their album’, and consequently, she suggests, pillaged the old manuscript for its images while disposing of its text.⁵⁵ There is, however, no evidence for such a history of the album, and it is just as likely that the miniatures were, as David Roxburgh proposes, taken from a damaged or already fragmentary manuscript.⁵⁶ We cannot, in short, detect here the sort of attitude that led much later to the dismantling of Islamic manuscripts in order to supply individual paintings for the Western market. It is difficult to imagine that books in good condition were, before the days of mercenary dealers, wilfully dismembered: it seems more probable that the paintings that found their way into albums either came from manuscripts in poor states of preservation or had never actually been included in the codex for which they were intended. Indeed, the Istanbul album referred to above contains three rejected folios from the magnificent *Shāhnāma* made for Shah Tahmāsp. The presence in albums of miniatures taken from books thus cannot be considered convincing evidence of an attitude that disassociated text from image, especially since they sometimes seek to reinforce their relationship to the manuscript tradition. We thus find that the relevant passages of text are added to remounted *Kalīla wa Dimna* paintings,⁵⁷ and there is also a case of a picture being mounted in such a way that the text on its reverse can still be seen.⁵⁸

Moreover, the majority of pictures contained in albums did not derive from pre-existing manuscripts at all, but were created from the outset as individual single-sheet works. The prefaces make clear that album paintings frequently began life individually as independent artefacts, and that their collection and placement in a codex was born of a desire to

⁵¹ There are in fact two separate sections based on unicorn lore in the *Nāʾt*, although only in the first is the beast explicitly identified as a unicorn (*kardunn*), whereas in the second, it is more ambiguously dubbed a *dābba* (animal), presumably because the book’s compiler was unaware that it should be identified with the unicorn. In spite of its more prosaic name, however, the *dābba* still occupies an important place in the *Nāʾt*, likened as it is to a Prince of beasts capable of purifying stagnant water for the benefit of his thirsty subjects. For the full implications of the rich narrative of the *dābba*, see Contadini 2003, pp. 21–27.

⁵² See Contadini 2003, esp. pp. 21–29. For more on the relationship between text and image in the *Nāʾt*, see also Contadini 2005.

⁵³ For the first two centuries of this tradition, see Roxburgh 2005.

⁵⁴ Roxburgh 2005, esp. pp. 31, 34–35, 193, 251.

⁵⁵ Cowen 1989, p. 8.

⁵⁶ Roxburgh 2005, p. 207.

⁵⁷ Roxburgh 2005, p. 207.

⁵⁸ Roxburgh 2005, pp. 203–05.

protect and preserve them. For example, the preface written by the calligrapher Mīr Sayyid Aḥmad in the album he compiled between 1564 and 1566 for the Safavid nobleman Amīr Ghayb Beg states that the calligraphies and images therein had been ‘continually discussed in his majesty’s [the Shah’s] paradisiacal assemblies and celestial gatherings’ as loose works, and were brought together and arranged in an album so that they could be viewed in a more convenient and orderly fashion.⁵⁹ Among these loose works may well have been pieces ultimately derived from manuscripts,⁶⁰ but what is significant here is that no mention is made in this preface nor indeed in any other of intact books being plundered for their material.

Being as they are images in their own right with no accompanying text, the majority of album paintings are, then, radically different in nature from those of the manuscript tradition, even if stylistically and iconographically related to them. Such pictures can be seen as small-scale, portable equivalents of mural paintings: they simply belong to another category of artistic production unrelated to that discussed here. True, in some cases they may be assembled in a meaningful order that can be regarded in a certain sense as narrative, but the fact that they can then be ‘read’ in some way still fails to bring them within the orbit of the ‘functional’ miniature cycles which are our present concern. They were not, in other words, conceived as miniatures that had at last gained their emancipation from the constraints of a surrounding narrative, but as free-standing entities to which questions about the nature of the text/image relationship are irrelevant. This becomes increasingly apparent the further one moves on in time. For example, the single-sheet works produced by Rīzā-yi ‘Abbāsī and his contemporaries in Iran in the late-16th and early-17th centuries, which consist mainly of depictions of courtly individuals or couples engaged in genteel pastimes, some of them, no doubt, real personages,⁶¹ have moved so far from the classical Islamic narrative tradition both in subject matter and feel that they must be deemed a totally separate branch of

production from manuscript miniatures. Indeed, by privileging the figure as a subject in its own right and dispensing with any sort of text, these works might be regarded as being closer in intention to European figural studies and *fêtes champêtres*, especially since, stylistically and iconographically, they betray Western influences.⁶²

Earlier production, however, is dominated by manuscripts within which illustrations are intimately wedded to the text, thus rendering the notion of the emancipation of the image irrelevant. It is hoped that the present publication will help nurture and develop a type of approach to these which, I have argued, is both more appropriate and more productive, so that we can arrive at a more balanced estimation of what survives of a significant segment of Islamic art: early manuscript illustration. To do so means to shift perspective: not to downplay the search for iconographical relationships and derivations, but rather to avoid the kind of stylistic comparison of evolutionary intent that produces sterile implications of relative aesthetic rankings at the expense of placing the images not just in relation to a host text but also in the context of the cultural, political and economic world within which they were produced and consumed. It is, then, an approach that rejects the search for the visual masterpiece to be evaluated in isolation according to criteria on which the culture itself is largely silent, and instead insists on the relevance of context. With no loss to the critical evaluation of the visual domain, but rather a potential enrichment, it places centre-stage not the individual image but that complex and fascinating artefact, the manuscript. Such indeed is the approach found in what little survives of historical Islamic writings on painting, for the painter in these texts is never considered apart from other practitioners of the arts of the book. The relationship in the history of Islamic painting between image, text, and book

⁵⁹ Roxburgh 2005, p. 223.

⁶⁰ Roxburgh 2005, p. 231 states that only two of the album’s thirteen paintings may have come from manuscripts, although even this is not certain.

⁶¹ See Canby 1996b, esp. chapters 3, 4, 5, 9 and 10.

⁶² These include attempts at suggesting spatial recession and at modelling and shading. Sheila Canby, who has assessed these influences in detail, notes the importance of European prints as the means by which they were conveyed. (See Canby 1996a and Canby 1996b, pp. 17–18, 32–34.) A particularly striking example is a drawing by Rīzā of a reclining semi-nude (c. 1595) which is based on Marcantonio Raimondi’s print after Raphael of the sleeping Cleopatra, for which see Canby 1996a, p. 50 and figs. 4–5; and Canby 1996b, pp. 33–34, fig. 1, and cat. no. 8.

is, then, an indelible one, and it will serve as one of the guiding factors underpinning the articles that make up this collection.

Another concern here—one again related to better and more balanced contextualisation—will be to overturn the traditional prejudice that views Arab painting as essentially no more than a preliminary stage in some kind of linear incremental development towards the glories of Safavid Persian art. In fact, what survives of early Persian painting exhibits a variety of stylistic inputs, not all of which are attested in later material, so that lines of development are difficult to map. We now have a rather better understanding of later Persian painting, which has been the object of considerable scholarly attention, but it still remains the case that the early periods have been relatively neglected, and one of the main topics requiring further investigation is the nature of the relationship of early Persian miniature painting to the Arab painting that preceded it. By considering Arab painting here both separately and in conjunction with early Persian painting, it should be possible to investigate in greater depth its characteristic contexts and the nature and sources of its painterly techniques. Such an endeavour requires that we also deal with illustrated scientific literature, hitherto largely excluded from art-historical consideration but fortunately now gradually being accorded greater weight.

But I do not wish to dwell in too parochial a way on the problematical history of a single discipline. Rather I would hope that it is not only art historians who will benefit from this change of approach, but also our colleagues in textual studies. This is not, I must stress, to erode the domains proper to each: the philological skills deployed in editing a text are the same whether the manuscripts are illustrated or not, and the study of iconographical borrowings can be pursued independently of any textual surround. But for the study of manuscripts as wholes, especially when aimed at furthering our knowledge of their cultural place in history, relating visual content to textual surround is, I suggest, not only of benefit to a study of the images. In attempting to understand the status of a text, and how it was received and interpreted by its public, much can surely be learned from what was illustrated, and how.

Hitherto, then, Islamic art historians have too often ignored the contributions that textual scholarship

could make; and textual historians are perhaps not always aware of the cultural significance of illustrated copies, nor of the fact that at least some art historians do deal with texts: there is every reason to think that both parties stand to gain from a pooling of ideas. Indeed, one might go so far as to suggest that historians of Islamic miniatures would benefit from grouping their material not into ‘schools of painting’ determined by date and region, as has been the tendency hitherto,⁶³ but rather by the texts they illustrate. Works such as Grabar’s monograph on the *Maqāmāt*⁶⁴ and O’Kane’s on the *Kalīla wa Dimna*⁶⁵ have demonstrated the benefits of this approach, which accords the relationship between text and image its due status and allows processes such as iconographical transmission and variation to be more clearly traced.

In all fairness, it should be said that the lack of an integrated approach in the past reflected the fact that various areas of potential contextualization were closed off because of lack of information. Although research continues and further information comes to light, it must be conceded that given, for example, the general paucity of archival material, this inhibiting situation is unlikely to improve dramatically, just as we are still afflicted by the problem that manuscripts are all too often mutilated and dispersed. Even those works that remain intact can, depending on the location or nature of the place in which they are kept, be difficult to access and view.⁶⁶ That being so, our knowledge of the nature and narrative of the source manuscripts may well remain limited. But it is nevertheless the case, as the following chapters demonstrate, that as well as gaining further interpretative insights into the images themselves, much may still be learned about both the cultural milieux

⁶³ As exemplified, for example, in Ettinghausen *Arab Painting* (Ettinghausen 1962) and Binyon, Wilkinson, and Gray 1933.

⁶⁴ Grabar 1984.

⁶⁵ O’Kane 2003. Although O’Kane’s work concentrates on late-14th-century Persian manuscripts, his approach is one guided by a common text rather than notions of a regional or chronological school, as he makes clear in his introduction (esp. p. 18).

⁶⁶ For some of the difficulties affecting the study of Islamic miniature painting and the often limited resources open to the scholar of this field, see Grabar 2000b, pp. 16–29.

of production and the complex textual traditions manipulated within them.

In extending our knowledge of a body of work hitherto insufficiently studied, they also underline how unjustified was Martin's omission of 'Arab' from his title. But the term is not without snags. Grabar had already reflected upon criteria and nomenclature in *The Mediation of Ornament*, and here we may also refer, more specifically, to the difficulties revealed by Ettinghausen, for whom the concept 'Arab painting', if not problematic, was certainly not straightforward. Dismissing a crude ethnic definition, he stresses the complex melting-pot character of the world of culture, but in so doing is in effect obliged to retreat to the somewhat arbitrary notion of a chronologically cut segment of 'Islamic' civilization within which Arabic retained its pre-eminence. However, the relevance of a linguistic criterion to painting is by no means clear, and further cracks appear with attempts to separate off most of Iran (tenaciously preserving Sasanian traditions), to invoke the notion of 'Arab-Muslim art', or to speak in terms of an 'Irano-Iraqi style'. Hardly surprising, then, that Grabar should find it necessary to critique conventional terminology and find it lacking. The title of our proceedings had, though, already been formulated, and however methodologically open to objection the phrase 'Arab painting' might be, we are at least agreed that the materials gathered for scrutiny under this rubric contain, if by no means all, at least a representative sample of a fascinating corpus of illustrated manuscripts that fully deserves independent consideration.

Although evidently born of the desire to transcend inherited methodological limitations in its exploration of this corpus, the present work is also inevitably of its time, inscribed within the recent stages of the history of ideas. Islamic art history is still articulated, essentially, in relation to the approaches and ideologies whence derive our interpretations of Western art, and is still produced overwhelmingly by scholars from or trained in the West, however suspicious of orientalist biases they may be. But at least it can now claim that by abandoning the isolation of images for aesthetic contemplation in favour of a more sensitive appreciation of the whole of which they form a part it allows for richer interpretations. At the same time, the increasing alertness to the intellectual, material and political environment that is fostered by fuller consideration of the factors controlling the produc-

tion and consumption of illustrated manuscripts should provide a securer footing for our attempts to arrive at a sympathetic and better informed understanding of this hitherto somewhat neglected body of material.

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WHAT DOES ‘ARAB PAINTING’ MEAN?

Oleg Grabar

The essay that follows deals with a topic that plagues the established and generally accepted terminology. With each generation of scholars making further advances in the field, it is impossible to address this problem comprehensively or definitively, but I trust nonetheless that my observations may have some use in establishing a different dimension for the terms we use and in helping to outline a proper frame for scholarly investigations often obscured by a defective terminology.

My remarks will not be illustrated and my bibliographical references will be limited, as the point of this essay does not lie in the description and interpretation of individual images or even manuscripts, but in the evaluation of a large body of data and in an attempt to provide epistemological coherence to what seemed to me to be a rather vacuous terminology, easy to explain historiographically and even emotionally or politically, but hardly justified intellectually.

When I first heard of the topic ‘Arab Painting’ for a colloquium and its subsequent publication, my first reaction or rather guess—as it turned out a correct one—was that most of the contributions will deal with the manuscript illustrations of Arabic texts written between 1200 and 1400 and from an area extending from Egypt to the Zagros mountains. Here and there tenuous extensions may be made to this core area and time. Mention can and will be made of the western Islamic world or of Iran. Fragmentary examples will be discussed from an earlier time than 1200, or 1199 to use the date of the Paris

Kūtāb al-diryāq, as the starting date of the bulk of our information on Arab manuscript illustrations. There will be few references to later centuries, as there is an unwritten but on the whole justified scholarly agreement that the later illustrated manuscripts of the *Maqāmāt* in Manchester and Sanaa, sundry examples of scientific or medical illustrated books, the perennial ‘*ajā’ib*’, and a few *qisaṣ al-anbiyā*’ of later times are clearly derivative and qualitatively inferior to the works of the thirteenth and fourteenth centuries. Despite the focus of this publication on the art of the book from the turn of the thirteenth century to the end of the fourteenth, I will still consider the broader topic of the meaning of the word ‘Arab’ when applied to painting in general (or for that matter to any other visual art) as my main concern.

But is it proper to call the illustrations of the thirteenth and fourteenth centuries works of ‘Arab’ painting? What is the ‘Arab’ entity that would have sponsored or appreciated, maybe even enjoyed, these paintings? Is it a people, the ethnic entity that came to dominate the Near East in the seventh century, but whose cultural domination over subsequent centuries is more difficult to ascertain? If, alternately, it is the language, Arabic, of the manuscripts that is the deciding factor, why is the writing and decoration on Nishapur plates (as opposed to those from Kashan or Gurgan) with their purely Arabic proverbs not included when Fatimid lustreware is, even though it hardly ever include writing? Does an illustrated Arabic version of Rashīd al-Dīn’s *Jāmi’ al-tawārīkh*

become a work of Arab painting? Or are we dealing with a regional distinction, 'Arab' being identified with areas where the Arabic language would have predominated as the most common means of communication?

There is a lot of *a priori* confusion in our terminology. So we can turn to authorities. One is the Internet, which has some 867,000 entries for Arab painting, most of which deal with twentieth century art in Arab countries or by Arab artists elsewhere. I am sure that thirteenth century miniatures are there somewhere, but they do not pop up immediately. It is clear that whatever we, professionals in the field, call Arab painting is not what our culture of information does so call. A book like the recent and enlightening *L'Image dans le Monde Arabe* (Paris, 1995) neither shows nor quotes, even, I believe, in footnotes, any of the works discussed in the following chapters.

For a more restricted search on the Internet, we can put quotation marks to 'Arab painting.' The field of possible hits is reduced to something around 700, more than half of which are to the second authority I mean to bring up, Richard Ettinghausen's book entitled *Arab Painting*, published in 1962, a generation and a half ago. I will not comment on the procedures used to classify matters on the Internet, although rather interesting questions of culture and ideology are indeed raised by the differences between the two lists. It is altogether also regrettable that the Internet does not recognize anything significant written on the subject since 1962 (and that includes quite a few major scholarly achievements which have not been caught by the medium's antennas) but it is also a testimony to the breadth and scope of Ettinghausen's book that, forty years later, it still dominates our definition of the field. In this book the private secular and public religious art of the Umayyads, the illuminations of the Qur'ān, the paintings of the Cappella Palatina, or the lustre ceramics from Fatimid times are all seen as examples of 'Arab' painting, and there is an assumption in the book of a formal continuity which ties these discrete groups to each other and which separates them from what came before them or from contemporary arts elsewhere.

The term 'Arab' in Ettinghausen's book is not simply a label of convenience, which, like the word 'Gothic,' could be artificial and misleading or at the very least meaningless. It represents a style associated with a specific group of men (possibly even women)

and Ettinghausen himself tried in the conclusion of his book to define a vertical continuity to a consistent Arab painting over the centuries. In his definition, there was a coexistence throughout the medieval centuries of two styles, one open and dynamic, the other one motionless and closed. Such general definitions are pretty useless as they can be applied to almost any artistic tradition. They reveal a great scholar's unease in handling a subject for another public than the academic one that was normally his venue, an unease which permeates both the introduction and the conclusion of his book. There are probably many reasons to this unease and it is probable that we are today more sensitive on the subject than scholars were forty years ago. At that time, scholars in the western world did not participate in the spirit which greeted his book in the Arab world. For there was a fascinating and rather disturbing paradox in this book. To its editor, Albert Skira, and to the general public of Western scholars and amateurs, it was part of a revolutionary series that brought out until then marginal periods and areas of the history of art within the limelight of superb colour photographs. But, quite unwittingly I suppose, the book of Arab painting became a revelation to the emerging Arab world in ways that found no parallels in other Asian cultures covered by the Skira series. Just as the word 'Gothic' had originally an ideological connotation dealing with a certain kind of European ethnic nationalism, so the word 'Arab' was seen as expressing an ideology, a national one which is as complex and confused as Arab nationalism is today. There were Iraqi stamps of the celebrated camels from the 1237 *Maqāmāt* manuscript after the appearance of Ettinghausen's book, and the name of al-Wāsiṭī was used as a flagship to identify contemporary artistic efforts and groups of artists. He became a major cult figure and a life size statue of him was made in Baghdad by the recently deceased Iraqi sculptor Ismā'īl Fattāḥ al-Turk, even though the 1237 manuscript in Paris, the only one which shows al-Wāsiṭī's name in its colophon, had never been published in its entirety until 2004.

But it is these assumptions about a coherent body of visual images that led to another role for 'Arab' painting, that of the short-lived parent for a richer and more glorious 'Persian' painting. And to justify this role in the Darwinian scheme of so much of the History of Art, we have, among a few other examples,

a perfect 'missing link' (one of Richard Ettinghausen's favourite terms) in the codicologically confused *Manāfi' al-hayawān* of the Morgan Library in New York.¹ It has the right date (1297–8 or 1299–1300), later than the masterpieces of an 'Arab' painting but earlier than the first great creations of 'Persian' painting. It contains next to each other images that would belong to the earlier tradition and novelties brought from China. I shall return to the question of how and why such 'missing links' were important in the historiography of the last century, but the weakness of the argument of a missing link fully emerges as one tries to imagine the operation of an atelier that would have tried to balance one tradition with the other. Some master mind would have decided that elephants are to be done in 'Arab' style, while varieties of deer are in Chinese. And other equally silly constructions of a process of creation are possible.

A last area of intellectual and methodological confusion derives from the fact that all the examples to be discussed in this book come from illustrated manuscripts. It is true that manuscripts have been better preserved than other forms of painting, but, in trying to understand them, we are faced with two sets of difficulties. One is that there is a methodology for the study of illustrated manuscripts which has been developed for medieval Christian art and which was extended, in theory at least, to all artistic traditions with text-based narratives. The method is associated with the name of the late Kurt Weitzmann and, together with the celebrated sinologist Wen Fong, I was part of the graduate seminar in 1952 in which Weitzmann tried to universalize the visual methodology of *Buchwesen* to the Princeton sauce of the time. It took me thirty years and the supervision of one doctoral dissertation to realize that the neatness of the method was not applicable to secular books which form the vast majority of illustrated manuscripts in the Islamic world and which were produced for an ever changing book market or for the fickle patronage of a court rather than for the permanent liturgical practices of a church. While the structure of individual illustrations may often reflect standard derivative procedures discussed in Weitzmann's books, the relationship between secular manuscripts

is quite different from whatever prevailed in scriptoria attached to ecclesiastical organizations.

The other difficulty is the broader issue whether it is indeed true that Arab painting was restricted to illustrated books in the thirteenth and fourteenth centuries, while preserved in other media—wall painting, mosaics, ceramics—during earlier centuries. Is this an accident of preservation or a shift in patronage and use? Or, to put it another way, it may just be that the operative novelty of the thirteenth and fourteenth centuries lies in the growth of a book industry and that illustrations are primarily the by-product of the economics of book making and of the taste associated with it rather than a phase in the history of painting. In either case, accident of preservation or shift in use, the adjective or modifier 'Arab' seems secondary to more significant questions of visual representation and of cultural history.

What these observations and queries do establish is, first, that there is a great deal of confusion and even of misunderstanding in the use of the modifier 'Arab' for painting and, secondly, that the works which are involved lend themselves to all sorts of approaches, in few of which, if any, the 'Arab' character is of any significance. In order to clarify the issues and to propose, as you will see, a radical solution to the question of what, if anything, is Arab in Arab painting, I shall comment on two matters: the origin of the term 'Arab' as applied to art in general and to painting in particular; and the patronage of thirteenth century manuscripts.

The use of the adjective 'Arab' for a category of artistic creations seems to date to the second half of the nineteenth century and to have grown primarily among learned professionals associated with the foreign community of Cairo. Prisse d'Avesnes' *Art Arabe* (1877), Stanley Lane-Poole's *The Art of the Saracens in Egypt* (1886), and Albert Gayet's *L'Art Arabe* (1893) shared more or less the same public in Egypt and in Europe. What is remarkable about all three of these books is their expressed reluctance to use the term 'Arab.' Prisse d'Avesnes sees the art with which he is involved as an example of the work of 'Semitic races' stopped eventually by 'the genius of the Western races.' ('genius' meaning here innate characteristics rather than overall superiority, but I may be giving him the benefit of the doubt on this point). Gayet felt 'obliged (*contraint*)' to use a title consecrated by usage and therefore he accepts

¹ M 500.

it, but with reluctance, for 'if there ever was a title empty of meaning, even in total opposition to whatever it defines, it is assuredly this one.... The Arab has never been an artist,... the study of forms and of colours leaves him indifferent... and when he is obliged to become an architect, he merely borrows his material from Greek or Byzantine monuments.' Furthermore Gayet differentiates a new Arab art from Moorish (mauresque), Turkish, and Persian, all three of which existed for several centuries as modifiers for several 'arts.'

Lane-Poole's explanation for not using the word 'Arab' and preferring 'Saracenic' is equally curious: 'The subject [of his book] is what has been commonly known as 'Arab' or 'Mohammedan' art. Both of these terms are misleading—for the artists in this style were seldom Arabs and many were Christians—and the general term 'Saracenic' was substituted... it means 'Eastern' and is a universal designation of Muslims in the Middle Ages.' To Lane-Poole the word did not apply to Persians or to North Africa.

None of these writers knew anything about painting except Prisse d'Avesnes, who shows two illustrations from the Schefer *Maqāmāt* which still belonged to the collector-scholar-diplomat Schefer and which Prisse d'Avesnes did not know how to handle within his survey of monuments.

The need for a term in *fin-de-siècle* European Cairo was clear, because one had to distinguish from classical and Ancient Egyptian a primarily architectural and object-based creativity associated with the practices and immediate past of the surrounding native population. And the term 'Arab' rather than 'Islamic' was adopted because it was a parallel to already accepted terms like 'Turkish' and 'Persian,' or, in a farther background, 'Italian' or 'German.' The distinction was made between what was then called 'races' rather than between cultures, and races were then identified or defined through language.

I am not exactly certain when 'Islamic' (at times 'Muhammedan') began to be used, but it was already present in the first decade of the twentieth century with the big exhibition in Munich and with the manuals by Henri Saladin on architecture and Gaston Migeon on all other arts. The term ended up dominating the field, but Migeon still maintains in his text an 'ethnic' division by arguing that there were or are three categories of Islamic art: Arab, Persian and Indo-Persian, Turkish, even though he does not

contrast these distinctions very much within his text. Ernst Kühnel published a *Kunst und Kultur der arabischen Welt* as late as in 1943, without a word on paintings and without a bibliography. Altogether, the problem is that the word 'Islamic' seemed too general or too restricted if limited to a religion, and major objections have been raised to it by Turkish and Iranian scholars and critics, if for no other reason that Arab-centered ideology and the implication of the faith's presence tended to equate it with 'Arab.'

In short, a term which may have made some sense within the cultural setting of Western Europe and of Cairo in the second half of the nineteenth century has become absurd within the historiography of the late twentieth century. Contemporary Arab countries do not share the same artistic pasts, although the common use of the Arabic language is or can be a bond between them. And even if the term makes some sense in the contemporary world, it does not do so in the past, when its use reflects a national, ethnic, and almost racist definition of people which is not acceptable for most other artistic traditions, except when, as with China and Japan, linguistic and cultural characteristics are intimately tied.

What is more curious is that geographical definitions by regions or climate are hardly ever mentioned in any of these books, nor are historical ones like dynasties. It is not that scholars have not tried later. By now, the existence of a school of Baghdad is assumed in most learned literature and certainly in national pride. But there are, I believe, only six manuscripts specifically identified with Baghdad; three of them are late thirteenth century and two of these are in Persian; there are also mechanical manuals of horsemanship which can hardly be considered as major works of art, although their technical interest is considerable; their demonstrable relationship to Baghdad is unexpected since the city was not a centre of military significance at that time. It is, of course, true that historical logic and cultural or social history make Baghdad a possible, if not even a likely, centre for the production of illustrated books, and two or three details in manuscripts like the Istanbul *Maqāmāt* do evoke Baghdadi buildings. The main building involved, the Mustanşiriyya, was celebrated all over the Muslim world and nothing requires that a visual reference to it identifies the place of a manuscript's composition. One manuscript associated with Baghdad was completed in 1280 in

Wāsit, by then a minor city, and one in Marāgha (1294–99), by then a major Mongol-sponsored centre of learning. Thus, even though some contemporary historians have identified five 'established' centres for Arab painting (Syria, northern Iraq with Mosul, Southern Iraq with Baghdad, Mamluk Egypt and Syria, Spain and Morocco), the hard and direct evidence for any of these simply does not exist. It remains, however, true that, on the basis of their cultural and social history, any one of these areas *could* have been a major centre for painting. But, if, in partial contrast with metalwork for instance, the identification of a place of manufacture is lacking in most of these illustrated manuscripts, do we have today any justification to give such importance to the place where a manuscript was copied and decorated? When such an identification does appear, it becomes an important document which needs to be explained for the specific manuscript on which it occurs, but it is not useful, perhaps even harmful, in defining a whole set of illustrated manuscripts. Signatures and dates matter in thirteenth century Islamic art just as they do in nineteenth century Western painting; they are indicators of something a maker or a patron wanted to tell. Their absence implies that the time and place of the making were not significant aspects of the creation of a manuscript.

We may move to slightly more solid ground when we turn to history, to time as a mode of definition. Out of 45 illustrated manuscripts between 1200 and 1400 in Ettinghausen's book and Holter's list, specific dates are provided in 23, slightly over half. Thus, for reasons that may be psychological or commercial, the identification of a time of making was more frequent than that of a space, but does any chronological sequence make sense without a space for it? But then not a single manuscript provides the name of a patron, although I know of one Dioscorides manuscript in Paris (*arabe* 2849) dated 1219 which was assembled for an *isfahsālār*, a rather common title for a middling official, with the interesting name of Abū Ishāq Ibrāhīm ibn Ya'qūb. A systematic survey of other manuscripts may yield other names, but it is curious that the sponsors of the thirteen illustrated *Maqāmāt* manuscripts or of the pseudo-scientific texts attributed to Galen or Dioscorides are unknown.

Or are they? It is rather curious that several, mostly pseudo-scientific, manuscripts open with a fancy frontispiece involving the representation of a military

ruler or of a prince. It has been proposed that the major ruler of Mosul in the early thirteenth century, Badr al-Dīn Lu'lu', was represented at the beginning of several volumes of the *Kitāb al-aghānī*, because his name was added to the sleeve of the main personage on one of the frontispieces. These words are a later identification, not an original caption, but the point of a systemic princely image at the beginning of these and other manuscripts can well be to refer to princely patronage.

But who would have been these princes? Why are they anonymous, hardly a characteristic of the ruling establishment anywhere? The answer may well be that these frontispieces did not refer to the ruling military or feudal class, but were simply visual signs identifying opulence and luxury, proclaiming the expensive cost of a manuscript. I was much taken many decades ago by Bishr Farès' attempts to find iconographic specificity in so many frontispieces to the *Kitāb al-aghānī*. Even if he was wrong in specific interpretations, his procedure, I thought, was appropriate. Although willing to be reconverted, I no longer think so and rather believe that variations in frontispieces are not references to historically definable people, stories, or events, but attributes of a codex, of an object for reading which is also a product for profit or for vanity. The point may be strengthened by the often illustrated and often discussed double frontispiece of the 1237 *Maqāmāt* in the Bibliothèque Nationale in Paris. In front of a typical crowd of urban onlookers, a military figure with a fur hat faces an Arab in a turban. Arab author and Turkic or Kurdish ruler? Man of the sword facing a man of the pen? There is no obvious answer and so far no one has been able, to my knowledge, to identify such details in the composition as could explain them. The same argument applies to the rich frontispiece of the Vienna *Kitāb al-diryāq*, whose unique features beg for a concrete identification of personages, symbols, or events. But the uniqueness of its combination of features and the absence of attendant written information make it unlikely that a stroke of intellectual luck or brilliance will ever uncover the exact meaning of these features. And, if we ever provide a concrete explanation for these frontispieces, such explanations deal for the most part with the non-Arab world of the ruling class. If, on the other hand, we provide a generic explanation such as wealth or power, then we have a wider range for possible patrons, but no

specific identification of any one of them. We cannot answer the basic art historical questions of when, where, and for whom a work was created.

In short, we do not know how to read these images or, rather, we are not certain that any one of the interpretations we can provide is the right one, and therefore we do not know how they relate to the texts which follow. Eventually we will understand these frontispieces, but, in the meantime and with the exception of one half of the 1237 double frontispiece, the world they depict—as opposed to illustrations based on the texts and to author's portraits based on myth—does not define an 'Arab' world, at best the world of a non-Arab ruling class, possibly symbolizing power and wealth.

In concluding these remarks, let me return to the original question of the meaning of the word 'Arab' in 'Arab painting.' It is an artificial creation of a Western passion for taxonomic order around identifiable people or nations or races which appeared in the second half of the nineteenth century. It only makes sense in terms of the language in which a text is written, and the study of manuscripts, illustrated or not, has its own rules and habits. But to the historian of art the Arabic of texts is secondary, merely an excuse for illustration and decoration. The manuscripts are often dated, but rarely localized or with identifiable patrons. I would like, therefore, to propose that the terms 'Arab' or 'Arabic' be restricted to texts and that all other matters like paintings be identified with the time of their production—Atabeks, Late Abbasid, Fatimid, Mamluk, and so on—and be classified together with other contemporary creativity, metalwork for example. Or else the illustrations and the decoration could be identified through the quality of its manufacture—quality of script and of illustration—and attributed to different social classes or levels because the making of manuscripts was part of a commercial enterprise. At this stage of my knowledge, I am only prepared to make an exception to my judgment for the 1199 *Kitāb al-diryāq* in Paris. But others may follow suit and help in deciding whether we can indeed apply different categories of thought for paintings in manuscripts than the ones we use for texts. Or else we may decide that we have to know better the practice of making books, of writing texts, or preparing a range of types for

manuscripts of the holy text, before we can really handle the images.

I would argue then that the term 'Arab' is misleading as a scholarly category (ideological values are another matter) and that the images with which we deal (in contrast to the texts in the middle of which they are found) should and could be identified by their time and by their social context much more usefully and much more meaningfully than by their ethnicity. The essential task of scholarship is to define these parameters of any one manuscript which can be fitted into the puzzle of the art of the time, of a place, or of a patron. Time, place, and patronage have different attributes attached to them and the investigation of these attributes is one of the tasks facing us all.

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SECTION 2

SCIENTIFIC MANUSCRIPTS

ART IN THE NAME OF SCIENCE: THE *KITĀB AL-DIRYĀQ* IN TEXT AND IMAGE

Jaclynne J. Kerner

This paper will consider the illustrated copies of the *Kitāb al-diryāq* (*The Book of the Theriac*, often called *The Book of Antidotes*) from a new vantage point (Paris, Bibliothèque Nationale, arabe 2964, and Vienna, Österreichische Nationalbibliothek, A.F. 10).¹ Taking an interdisciplinary approach, this study aims to clarify the *Kitāb al-diryāq*'s literary context, evaluate the impetus for its illustration in light of a new understanding of the text, and explore the possibility of a shared pictorial program.

The manuscripts likely share a northern Mesopotamian (Jazīran) provenance,² as well as characteristics congruent with luxury book status, such as figural frontispieces, a high 'rate of illustration,'³ extensive use of gold, careful calligraphy and illumination,

and sizeable physical format, both in folio size and the area reserved for images.⁴ The Paris and Vienna manuscripts are very close in size; although both have had their margins trimmed, their folios share an approximate size of eleven by seventeen inches.⁵

The *Kitāb al-diryāq* ostensibly concerns the famed 'universal antidote' of Antiquity and is attributed in its title to Galen, with the commentary of Yahyā al-Naḥwī (John the Grammarian/Johannes Grammatikos or Johannes Philoponus) of Alexandria.⁶ Scholars of Greek literature have never considered the *Kitāb al-diryāq* an authentic work of Galen; rather, it may be a pseudepigraphic Arabic original work.⁷ Commonly referred to as a scientific or 'pseudoscientific' work in the secondary literature, the *Kitāb al-diryāq* has also been described as an esoteric treatise containing elements of numerology.⁸ A careful reading of the text, however, points to an identification of the *Kitāb al-diryāq* as a literary 'hybrid.' While

¹ This paper presents some of the findings of my doctoral dissertation: Kerner 2004. I wish to thank the editor, Anna Contadini, for organizing the *Arab Painting* symposium at SOAS in September, 2004 and the present volume.

² The issues of regional style and provenance in early Islamic manuscript painting remain problematic. Kurt Holter attributed the Vienna *Diryāq* to a northern Mesopotamian 'school' of manuscript painting; Holter 1937a. Richard Ettinghausen later extended Holter's attribution of the Vienna *Diryāq* to the Paris manuscript, although Bishr Farès had previously attributed the manuscript to the 'School of Baghdad.' Ettinghausen 1962, 83–86; Farès 1953b, p. 940. I am grateful to Oleg Grabar for providing the latter.

³ Golombek 1972, p. 23.

⁴ While the term luxury book usually applies to works of courtly patronage, 'luxury' status may be ascribed to the illustrated *Kitāb al-diryāq* manuscripts (especially the Paris *Diryāq*) with little reservation.

⁵ Paris: 36.5 × 27.5 cm; Vienna: 36.5 × 28 cm.

⁶ Meyerhof 1932; U.S. National Library of Medicine 2000. See also Smith 1880, p. 321 and al-Nadīm 1970, pp. 613, 684.

⁷ Kerner 2004, pp. 121–22.

⁸ Meyerhof 1932.

scientific in *content*, the treatise is more closely related in *form* to biographical literature—particularly Arabic biographical dictionaries—than to didactic medical writings.⁹ An innovative literary form of the Arab-Islamic world, the Arabic biographical dictionary was ‘unique to Islamic culture.’¹⁰ The *Kiṭāb al-diryāq* transmits the authority and knowledge of nine physicians of Antiquity who successively developed and refined theriac recipes.

To date, there are only six known manuscripts of the *Kiṭāb al-diryāq*; of these, three, including the two illustrated copies, are roughly contemporary.¹¹ The earliest securely dated *Kiṭāb al-diryāq*—and the earlier of the two illustrated copies—is the manuscript housed in the Bibliothèque Nationale de France in Paris under shelf mark *arabe* 2964. The book’s copyist, Muḥammad Abū al-Faṭḥ ‘Abd al-Waḥīd, who is often assumed to have been the book’s illustrator, recorded the date Rabī‘ al-awwal, 595 (January, 1199) in the colophon.¹² The manuscript has lost at least four folios;¹³ in its present state, its thirty-six folios incorporate eleven figural compositions, a table depicting venomous serpents, and twelve pages with drawings of medicinal plants.¹⁴ The Paris *Diryāq* is probably

best known for its remarkable double frontispiece depicting anthropomorphic lunar representations.¹⁵

The next securely dated copy is an unillustrated manuscript combining the *Kiṭāb al-diryāq* with a didactic toxicological treatise, the *Kiṭāb al-sumūm* (*Book of Poisons*) of Shānāq al-Hindī, in a single volume of modest size.¹⁶ Dated in its two colophons to 1224 and 1225 CE, both tracts were copied by a single scribe, Ibrāhīm ibn Mas‘ūd ibn Qutluḡ ibn al-Shahrastānī.¹⁷ The manuscript was sold at Sotheby’s, London in April, 2002, and is now in a European private collection.¹⁸

The illustrated *Kiṭāb al-diryāq* in Vienna (Österreichische Nationalbibliothek, A.F. 10) lacks a colophon, but is usually dated between the first half and the middle of the thirteenth century.¹⁹ Its thirty-one folios contain a figural frontispiece and ten

⁹ In keeping with current philological usage, this discussion distinguishes between literary form (or genre, meaning the outward appearance or organization of a work) and content (or subject matter).

¹⁰ Auchterlonie 1987, p. 2.

¹¹ Extant manuscript evidence suggests that there were at least two versions, or recensions, of the text. The manuscript sold at Sotheby’s, London, along with those housed in Vienna, Cairo, and Beirut are representatives of a synoptic edition. The Paris *Diryāq*, however, represents a slightly variant text. Kerner 2004, esp. pp. 32–122.

¹² Farès 1953a, p. 10 and pl. XXI. Ettinghausen 1962, p. 86. Institut du Monde Arabe 1996, p. 156. In 1954, Régis Blachère suggested, somewhat indirectly, that the Paris *Diryāq*’s date was a later addition; Blachère 1954, p. 294. His suggestion, however, was based on his confusion of the original scribe (who wrote the text in alternating kufic and cursive scripts) with one of two later hands responsible for the cursive marginal glosses and renderings of plant names on the herbal pages. The problem was outlined and resolved by Bishr Farès 1957, pp. 97–98, n. 5. There is no good reason to doubt the authenticity of the colophon’s date.

¹³ The losses occur in two sections of the text: the accounts of Afriqlis and Fūthāgūras, and the tract on snakes. Kerner 2004, Catalogue and Appendix, esp. pp. 294, 297.

¹⁴ Farès mistakenly recorded that the manuscript contained thirteen (‘treize’) herbal pages; Farès 1953a, p. 14. Dorothea Duda listed a total of twelve herbal pages in her

concordance of the Paris and Vienna manuscripts; Duda 1992, vol. 1, pp. 48–49. For the figural text illustrations, see Farès 1953a, pls. XI–XVI, and for the snakes, pl. XIX.

¹⁵ For a fuller discussion of its iconography, see Kerner 2004, pp. 207–22. The double frontispiece is reproduced in Farès 1953a, pls. III–IV and colourplate labeled ‘Premier frontispiece.’ A colour reproduction is also found in Bibliothèque Nationale de France 2001, p. 112.

¹⁶ The manuscript is seventy-two folios in length, measuring 19.5 × 14.9 cm, excluding the binding, which is not original to the manuscript. Its margins were trimmed at some point in its history, as evidenced by losses of marginal illumination. The first folio is missing. Folios 2–25 comprise the *Kiṭāb al-sumūm* of Shānāq; the *Kiṭāb al-diryāq* fills folios 26–73. According to Manfred Ullmann, Shānāq flourished around 320 BCE. A number of additional manuscript copies of the treatise exist; Ullmann 1970, pp. 324–25 and p. 324, n. 8. See also Strauss 1935 and Levey 1973, pp. 15, 139. Sami K. Hamarneh considered the *Kiṭāb al-sumūm* a pseudepigraphic original compilation of Indian and Greek sources written in Arabic in the late second/eighth century; Hamarneh 1983, p. 223, n. 24.

¹⁷ The volume’s significance to the present study lies in the fact that it contains the earliest complete *Kiṭāb al-diryāq* text, which allowed for the definitive reconstruction of the illustrated manuscripts, both of which have losses. Kerner 2004, esp. pp. 6, 292–99.

¹⁸ The manuscript was a personal copy, made by the scribe for his own use; in the colophon to the *Kiṭāb al-sumūm*, the scribe wrote that he ‘copied it for himself,’ completing his work on 14 Rajab 621/August 12, 1224. The *Kiṭāb al-diryāq*’s colophon is dated 8 Jumādā al-ūlā 622/May 19, 1225. It has been reasonably suggested that the scribe was a physician and/or scholar. The volume was assigned a tentative provenance of Mesopotamia or Western Iran by Sotheby’s: Sotheby’s, London 2002, p. 30. It was sold as Lot 21 for £116,650. For further details of the manuscript, see Kerner 2004, pp. 17–27.

¹⁹ Kerner 2004, p. 13 and nn. 9–12.

figural text illustrations; although it lacks an herbal component, its contents include a table of snakes and three additional pages with representations of poisonous serpents.²⁰ Like the Paris manuscript, the Vienna *Diryāq* has suffered losses, probably totaling seven folios.²¹

Of the three later, unillustrated copies of the *Kūtāb al-diryāq*, two (the Cairo and Beirut manuscripts) appear to be copies of the manuscript sold at Sotheby's in 2002.²² St. Petersburg MS Dorn 123 is dated 2 Rabī' al-awwal 993 (4 March 1585); the manuscript is forty-two folios in length, measuring approximately 30.5 by 21.5 cm.²³ The Egyptian National Library, Cairo possesses a copy dated Muḥarram 995/December 1586 (MS 166 Ṭibb).²⁴ The manuscript is forty-seven folios in length.²⁵ Little is known about the latest *Kūtāb al-diryāq* manuscript. Described in the 1922 *catalogue raisonné* of the Oriental Library (Bibliothèque orientale) in Beirut, the manuscript is dated 5 Rabī' al-thānī 1151 (July 1738).²⁶ A note at the end of the treatise states that the book is a copy of a manuscript containing the book of Shānāq on poisons and that of Galen on the theriac, dated 14 Rajab, 621 (the date given in the colophon of the Sotheby's *Kūtāb al-sumūn*).

While the illustrated *Kūtāb al-diryāq* manuscripts are among the earliest and best-known illustrated

Arab manuscripts, it appears that the treatise itself has not been fully understood over the course of seventy years of scholarship. Although the earliest description of the *Kūtāb al-diryāq*, which appeared in 1922, summarized the treatise's textual contents, Max Meyerhof's 1932 claim of the text's mystico-magical, pseudoscientific content has had a greater impact on later generations of scholars.²⁷ Working from the late sixteenth-century copy in Cairo, Meyerhof discredited the treatise's purported commentator, Yaḥyā al-Naḥwī, as the author of a work of fantasy and numerology.²⁸ The presumed esoteric quality of the *Kūtāb al-diryāq* has retained currency, especially among art historians, who have otherwise tended to exclude the text from their discourse.²⁹ Hugo Buchthal's 1942 article on so-called Baghdadi miniature painting may also have cast a long shadow; in illustrated manuscripts like the *Kūtāb al-diryāq* and Arabic herbals, Buchthal maintained that the text serves merely as a 'pretext' for illustration.³⁰ Bishr Farès, who published his 'discovery' of the Paris manuscript in both article and monograph form in the early 1950s, expressed profound disinterest in the treatise and deferred to the opinion of Meyerhof.³¹ In the 1960s, Richard Ettinghausen, for the most part, circumvented the text, calling the treatise simply 'The Book of Antidotes.'³² After Ettinghausen, little was written on the subject until the 1980s, when several treatments of the illustration of Arabic scientific manuscripts appeared.³³ In contrast to previous scholarship,³⁴ this

²⁰ For the frontispiece, see Ettinghausen 1962, p. 91 or Duda 1992, Farbtafel 1. For the figural text illustrations, see Duda 1992, Farbtafeln 2–3 and Abb. 32–36 and pp. 39–40. For the depictions of snakes, see Duda 1992, Abb. 37–38.

²¹ Duda 1992, vol. 1, pp. 48–49.

²² Kerner 2004, pp. 29–30. The dimensions of the Beirut manuscript (19 × 14 cm) also closely approximate those of its model.

²³ Marie-Geneviève Guesdon refers to material suggesting the presence of two additional copies in private collections in the first half of the twentieth century, but notes the insufficiency of evidence to confirm their existence or present whereabouts. Guesdon forthcoming.

²⁴ Meyerhof 1932, p. 16.

²⁵ Unfortunately, Meyerhof recorded few of the manuscript's physical characteristics, such as dimensions. Kerner 2004, p. 28 and n. 44.

²⁶ P. L. Cheikho wrote that the treatise's author began by citing the physicians who discussed theriacs, with a word on their epoch and age; then, he surveyed the various theriacs that the ancients had invented and detailed their composition, for which there are complicated recipes. Lastly, the author described the different types of vipers and serpents used in the theriac and the ways in which one uses them efficaciously. Cheikho 1922, pp. 405–06.

²⁷ Meyerhof wrote, 'Diese Schrift ist ein mystisch-magisches Erzeugnis vermutlich der alexandrinischen pseudonaturwissenschaftlichen Spätliteratur, und keinesfalls von Joannes Grammatikos verfasst.' Meyerhof 1932, p. 21.

²⁸ Meyerhof 1932, p. 21; Farès 1953a, p. 4.

²⁹ Meyerhof's 'dim view' of Yaḥyā al-Naḥwī was challenged in the 1950s by Franz Rosenthal; Rosenthal 1954, p. 57.

³⁰ Buchthal 1942, p. 33. Ironically, seven years earlier, Kurt Holter had outlined the text in his study of the Vienna *Diryāq*. Holter, however, did not seek to understand the manuscript as an illustrated book, as his primary objective was the establishment of a Northern Mesopotamian 'school' of manuscript painting. Holter proposed the existence of a school of manuscript painting based on visual affinities with other artistic media linked to Northern Mesopotamia. Holter 1937a, pp. 2, 4–5.

³¹ Farès 1953a and Farès 1953b.

³² Ettinghausen 1962, p. 83.

³³ For example, Brandenburg 1982; Hoffman 1982.

³⁴ Late twentieth- and early twenty-first-century scholars have either avoided the text (i.e. Institut du Monde Arabe

study proposes that an understanding of the *Kitāb al-diryāq* as a written work sheds light on the production of the illustrated books now in Paris and Vienna.

As a written work, the *Kitāb al-diryāq* comprises several components, the first of which is a lengthy title that acknowledges the treatise's medical content and alludes to its chronological/biographical form. The title's opening identifies the work as 'the book of the theriac of the eminent physician-philosopher (*hakīm*) Galen, drawn from the fundamentals of the first discourse of the book of Galen on electuaries, with the commentary of Yaḥyā al-Naḥwī the Alexandrian, who extracted these fundamentals and eliminated what was unnecessary... He simplified them and built his book upon them.'³⁵

The theriac is probably the most celebrated medicinal remedy in recorded history: evidence of its manufacture spans two millennia. The theriac gained renown as an antidote to snakebite in the writings of Galen, the second-century physician to whom the *Kitāb al-diryāq* is attributed, albeit falsely.³⁶ As the term's etymology suggests, the remedy's origin is traceable to Antiquity: the Arabic term *diryāq* (alt. *tiryāq*) is a loan word from the Greek for an antidote against a poisonous animal bite.³⁷ Theriacs were compounded from any number of animal, vegetable, and mineral ingredients that were pulverized, combined, and dissolved in liquid over heat. Honey was added as a binder, so that in its prepared state, the theriac had a soft, paste-like consistency and a sweet

flavor.³⁸ The term 'electuary' (*ma'jūn*) denotes a type of compound medicine having a soft, viscous texture and a sweet flavour.

The second, concluding phrase of the title reads, 'memoir of the names of the physicians who composed the theriac, one after the other, the additions and omissions of each one of them, from predecessor to successor, and they are nine [in number].'³⁹ The first is Andromachus [Andrūmākhūs] the Elder, court physician to the Emperor Nero, while the last is Galen (Jālīnūs).³⁹ Altogether, the *Kitāb al-diryāq* traces the history of the theriac and its makers over a period of almost 1,500 years.⁴⁰

In both illustrated manuscripts, the nine physicians of Antiquity are first pictured in the front matter in variants of the Late Antique or Byzantine type of author portrait. The Paris manuscript's artist arranged the portraits in groups of three on three (originally sequential) pages (for example, Fig. 1).⁴¹ Each physician is set within an architectural frame, singly or in the company of students, and surrounded by attributes such as books, bookstands, lamps, trays, and various vessels.⁴² In the Vienna manuscript, the physicians appear on the title page in portrait medallions arranged chronologically (*vis-à-vis* the textual sequence) in three rows of three (from right to left and top to bottom, Fig. 2). Each figure, seated against a high-backed chair on a semicircular rug, holds a book. Galen is drawn in profile, seated in the lower left-hand corner as if looking back toward his predecessors.

1996 and Sotheby's, London 2002), or relied on Meyerhof's claim of the text's esotericism (i.e. Pancaroğlu 2001).

³⁵ Kerner 2004, pp. 45–50. The title of the Paris *Diryāq* spans two pages that 'bookend' the three pages with 'author portraits.' The title pages are reproduced in Farès 1953a, pls. VI and X. The latter (modern pagination 23) includes the second half of the title and the opening of the summary chronology.

³⁶ Although the treatise does have some basis in Galenic writings, the independence of the *Kitāb al-diryāq* from the accepted Galenic corpus was confirmed in a private conversation with Lutz Richter-Bernberg, November 16, 2001. See Kerner 2004, pp. 49–50, 65–122, 132–35. The following sources are useful on the subject of the theriac: Bierman 1994; Stein 1997; Nutton 1997; Johnstone 1999; and Richter-Bernberg 1969.

³⁷ *Thēriakē*, lit., an antidote against a poisonous bite. The term likely passed into Arabic usage via a Syriac intermediary, *tēryaqi*. See Mouliérac 1996, p. 101; Levey 1962, p. 48; Troupeau 1996, p. 45.

³⁸ The English equivalent of theriac is treacle. The final step in the theriac's preparation was allowing it to ripen in a sealed vessel for a prescribed length of time prior to distribution and consumption.

³⁹ In chronological order, the physicians' names are Andromachus (Andrūmākhūs) the Elder, Abrāqlīdis, Aflāgūras, Afriqlis, Fūthāgūras (Yūyāgūras in the Paris *Diryāq*; see Kerner 2004, p. 180), Mārīnūs, Magnīs of Emessa, Andromachus the Younger, and Galen (Jālīnūs).

⁴⁰ Kerner 2004, pp. 50–60.

⁴¹ The three pages (numbered 34, 31, and 32), like the rest of the manuscript, are now bound non-sequentially. For simplicity's sake, only the modern pagination (in red Arabic numerals, found in the upper margin) is used here. The three folios are reproduced in Farès 1953a, pls. VII–IX and colourplate labeled 'Portraits des médecins de l'Antiquité.'

⁴² Interestingly, their order of appearance does not follow the textual sequence, for which see n. 39, above. The manuscript has a separate, unillustrated title page; see Farès 1953a, pl. VI and, for the inscriptions, Kerner 2004, pp. 305–06.

Formal sources for the physicians' portraits may be found in the portrait imagery of the Late Antique and Byzantine traditions. Portrait medallions in Late Byzantine manuscripts in particular have been suggested as prototypes;⁴³ such medallions, however, customarily encircled busts, not full-length figures. Analogies have also been drawn to Byzantine models in other media, especially ivory carvings.⁴⁴ A contemporary visual analogue is offered by an illustration in the *Warqah wa Gulshah* manuscript in the Topkapı Palace Library in Istanbul (Hazine 841, fol. 7v) in which the protagonists and their attendants flank a figure labeled *mu'allim*, 'teacher'.⁴⁵ The latter is seated against a high-backed chair in a manner nearly identical to that of the Vienna *Diryāq* portraits.

A summary chronology is found between the title and the body of the text, as is customary in Arabic biographical dictionaries; that of the Paris manuscript is given in tabular form (Fig. 3).⁴⁶ Here, the sequence of the physicians is established, and such data as the total number of years all of them lived (672) and the sum of the years in the gaps of time between their life spans (810) is provided. Each physician's life span is subdivided into the duration of his studies and the length of his professional activities.⁴⁷ As is often the case in Arabic historical and biographical writings, the summary is not a true chronology in the calendrical sense;⁴⁸ rather, the conventional method of relative dating used by Muslim chronographers for dates prior to the *hijra* is employed.

The summary chronology demonstrates the likelihood of the author(s)'s reliance on a chronological tradition established, in part, by Ishāq ibn Hunayn, son of the famed translator of Baghdad; Ishāq modeled his *Chronology of the Physicians* (*Ta'rikh*

al-aṭibbā') on that of Yahyā al-Nahwī.⁴⁹ There are several possibilities for Yahyā's identity, but Arabic sources such as the *Fihrist* of Ibn al-Nadīm credit him with several commentaries on works from the Galenic corpus, as well as an original chronicle, now lost, of the lives of the eight leading medical authorities of Antiquity, from Asclepius to Galen.⁵⁰ Although Yahyā's contribution to the *Kūtāb al-diryāq* has been called into question, the summary suggests the probability of a chronology attributed to Yahyā as a model or ultimate source for this component of the treatise.⁵¹

The body of the text consists of chronologically organized accounts of the nine physicians.⁵² Biographical data (such as the age at which the physician completed his studies and began making the theriac and the number of years he lived after composing his remedy) frame each account, which includes a list of indications or recommended uses for the particular theriac and its recipe. The theriac's list of ingredients grew over time, as did the number of its uses.⁵³ The first theriac (that of Andromachus the Elder) contained four plant ingredients and honey, and had nine beneficial uses, while that of the penultimate physician, Andromachus the Younger, had ninety-six ingredients and ninety-one indications.⁵⁴

⁴⁹ Ishāq ibn Hunayn served as an intermediary in the transmission of Yahyā's *Ta'rikh*; see Rosenthal 1954, esp. p. 57. For another point of view on Ishāq's use of Yahyā al-Nahwī's chronicle, see Zimmerman 1974, pp. 328–30. In any event, the format of the *Kūtāb al-diryāq*'s summary chronology is virtually identical to that of Ishāq's *Ta'rikh*; Kerner 2004, pp. 58–60. The composer of the *Kūtāb al-diryāq* should probably be added to the list of authors who used Ishāq, and, therefore, Yahyā, as a direct or indirect source; this list includes such figures as al-Bīrūnī (973–1048), Ibn Abī Uṣaybi'a (1203–70), al-Sijistānī (c. 912–85), and al-Mubashshir ibn Fātik (fl. 11th century). See Rosenthal 1954, p. 59.

⁵⁰ al-Nadīm 1970, p. 674.

⁵¹ The inclusion of a chronological summary utilizing a relative dating system may be viewed as additional evidence that the *Kūtāb al-diryāq* is an original Arabic composition; see also Kerner 2004, pp. 121–22.

⁵² A précis of the text appears in fuller form in the present author's dissertation; Kerner 2004, pp. 32–122. It was collated from the three extant late twelfth- and thirteenth-century copies of the *Kūtāb al-diryāq* (Paris, *arabe* 2964; Vienna, A.F. 10; and the manuscript sold at Sotheby's, London in April 2002).

⁵³ Kerner 2004, pp. 104–05, pp. 112–13.

⁵⁴ Andromachus the Elder's ingredients were laurel berries, gentian, myrrh, and costus (an aromatic plant). It was recommended for use against snakebite, scorpion sting, the

⁴³ Weitzmann 1952, pp. 262–63 and pl. XXXVI, fig. 17.

⁴⁴ Grabar 1964, pp. 85–86 and pl. IV, fig. 28. See also Hoffman 1982, pp. 254–304, in which parallels to Christian Gospel author portraits are drawn.

⁴⁵ Ipşiroğlu 1971, Abb. 16.

⁴⁶ For that of the Vienna *Diryāq*, see Kerner 2004, pl. 79.

⁴⁷ Galen, for example, 'lived eighty-seven years, seventeen as a youth and student, and seventy as a scholar and author.' Such formulations were common to both Greek and Arabic biographical writings.

⁴⁸ Duda 1992, p. 56.

The accounts of the two physicians named Andromachus (the Elder and the Younger) include a total of four anecdotes telling of the discovery of a cure or of the medicinal qualities of snakes.⁵⁵ A tract on snakes and their classification is found within the lengthy account of Andromachus the Younger; this section includes instructions for the capture of serpents and the preparation of their flesh for use in the theriac. In both manuscripts, a table delineates the types of venomous theriacal serpents (Figs. 4 and A).⁵⁶ A set of recipes for compound medicines, all of which contain a substance described as *maṭbūkh*, concludes the treatise.⁵⁷

The text of the *Kitāb al-diryāq* is therefore a sort of literary 'hybrid' whose content is scientific (more specifically, toxicological), but whose form relates the work to Arabic biographical dictionaries (which belong to the literary genre of *adab*).⁵⁸ The basic requirements for the Arabic biographical dictionary were minimal: a genealogy or list of names served as an armature for the accompanying narrative that included elements such as vital statistics, physical descriptions, and, sometimes, anecdotes.⁵⁹ Biographical dictionaries were usually organized around one or more of the following principles: death-dates, association with a particular locality or discipline, or area of intellectual or professional activity.⁶⁰ The

Kitāb al-diryāq's unifying feature is each physician's contribution to the development of the theriac.

Such works had as one of their functions the transmission of authority or the conferral of legitimacy upon a body of knowledge or activity.⁶¹ In the *Kitāb al-diryāq*, each physician was dependent upon the knowledge and recipe of his predecessors. The text relates that several physicians found their predecessors' recipes to be 'of good manufacture,' and that their motive for changing the recipe was solely to improve the remedy's usefulness, usually through the addition of ingredients. The treatise's form proved to be an ideal literary vehicle: the chronologically-organized format mirrors the progressive, additive development of the theriac over time.

The physicians' accounts were illustrated with two types of text illustrations. The first is often referred to as the 'explanatory drawing,' which is a somewhat misleading term since most explanatory drawings are fully developed paintings. Kurt Weitzmann suggested Antique and Byzantine prototypes for such illustrations, which usually depict the preparation of a medicine by a doctor, often in the company of an assistant.⁶² The tendency to illustrate treatises with medicinal content with explanatory drawings is evidenced by a range of manuscripts both Greek and Arabic. For example, several are found in the unique illustrated Nicander manuscript in the Bibliothèque Nationale de France (suppl. gr. 247).⁶³ Among Islamic manuscripts, explanatory drawings are most commonly associated with Arabic versions of the *De materia medica* of Dioscorides, a treatise on medicinal plants written in the first century CE and translated into Arabic in the ninth century CE, and its variants.⁶⁴ Like the explanatory drawings of the *Kitāb al-diryāq* manuscripts, contemporary herbal miniatures may detail everyday life in a manner uncalled for by the text.⁶⁵

bite of the rabid dog, the bite of harmful beasts, black bile, confusion of the intellect, quartan fever, splenitis, and bite of the venomous spider (phalangium). Aflāgūras' theriac contained ten ingredients, and had seventeen beneficial uses; Kerner 2004, pp. 72–74. Complex geometrically organized tables were devised for the theriac recipes, and those of the Vienna *Diryāq* are particularly elaborate; Kerner 2004, pls. 120–23, 125, 133. Galen codified and recommended the theriac recipe of Andromachus the Younger.

⁵⁵ Kerner 2004, pp. 66–67, 85–89, and 139–44.

⁵⁶ Kerner 2004, pp. 89–104.

⁵⁷ For an example, see Farès 1953a, pl. XX. In regular usage, the term *maṭbūkh* simply means 'cooked,' but it is also an epithet for cooked flesh or meat. Lane, ed. 1980, Part V, 1822. A portion of the text preceding the recipes provides detailed instructions for the preparation of snake flesh for medicinal use; in the context of the *Kitāb al-diryāq*, the term would appear to refer to prepared snake flesh. In a forthcoming article, however, Françoise Micheau introduces literary evidence for the identification of *maṭbūkh* as cooked wine; Micheau forthcoming.

⁵⁸ On the biographical dictionary as a characteristic form of Arabic biographical literature, see Cooperson 2000, xi and Young 1990, p. 168.

⁵⁹ Cooperson 2000, p. 2.

⁶⁰ Auchterlonie 1987, p. 4.

⁶¹ Cooperson 2000, pp. 14–15.

⁶² Weitzmann 1952, pp. 262–65.

⁶³ The manuscript includes both the *Theriaca* and the *Alexipharmaca*, and is the sole surviving illustrated Nicander manuscript. Omont 1929, p. 34; Weitzmann 1935, p. 33; Touwaide 1996, p. 13; Nicander 1997.

⁶⁴ Sadek listed seventeen Arabic herbals, twelve of which were illustrated. Sadek 1983, p. 13 ff. Weitzmann 1952, p. 250.

⁶⁵ The 'pharmacy' scene from the dispersed 1224 Dioscorides, for example, depicts the preparation of medicine from honey within an elaborate two-story structure (New



Fig. A. Snakes with weak venom and fourteen theriacal serpents. Pseudo-Galen, *Kitāb al-diryāq*, Jazīra, ca. 1250. Vienna, Österreichische Nationalbibliothek, A.F. 10, fol. 21r (365 × 280 mm) (Courtesy of the Österreichische Nationalbibliothek).

The Paris manuscript contains two explanatory drawings,⁶⁶ while the Vienna *Diryāq* has four.⁶⁷ A close structural relationship between text and image is easily discerned in both manuscripts' depictions of the physician Aflāgūras preparing his theriac. In that of the Paris manuscript (Fig. 5), the folio's second register contains the list of Aflāgūras' theriac ingredients and their measures. Directly above the miniature a line of text written in large, angular script reads, 'and he made it and fashioned it like this'; detailed preparation instructions immediately follow. Despite appearances, this line is part of the continuing text, not a caption, attesting to the careful planning of the manuscript's layout. The Vienna *Diryāq*'s corresponding image (Fig. 6) depicts a slightly more formulaic scene, which takes place in an outdoor setting. Its placement is similar to that of its earlier counterpart, near the conclusion of the account of Aflāgūras.

The second type of text illustration is the narrative composition, which was used in the depiction of the four anecdotes telling of cures or medical discoveries; all are told in first-person voice and include spoken dialogue. The first anecdote occurs near the beginning of the text in the account of Andromachus the Elder.⁶⁸ Andromachus, we read, emerged from study at the age of twenty, and was the first to begin making the theriac. He once traveled to an island, where he saw a young man crossing the road ahead of him. The youth was squatting to relieve himself when a small snake crawled out and bit him. The young man reacted quickly, killing the snake and then walking to a nearby laurel tree, from which he took berries and ate them. Andromachus, who had been watching from a distance, approached the youth and questioned him. The youth informed the physician that the laurel berry is an antidote to the poisons of all animals. After returning from his travels, Andromachus combined laurel berries with three additional ingredients and honey to create the first theriac.

In both manuscripts, the corresponding image conflates several stages of the anecdote. In the Paris miniature (Fig. 7), the abbreviated continuous narrative reads from right to left, with Andromachus depicted twice. Just above the illustration is a line of text, again serving as an informal caption, which reads, 'and he took some of its berries and ate them.' In the Vienna manuscript (Fig. 8), this statement is found two lines below the image. The physician's hand gesture signifying conversation and a prominently featured laurel tree are common to both compositions.

Three anecdotes providing empirical 'proofs' of the medicinal qualities of snakes form part of the lengthy account of Andromachus the Younger, whose chief contribution to the development of the theriac was the addition of snake flesh as an ingredient.⁶⁹ In the first of the three narratives, the physician recalls visiting a field in which tillers were cultivating the earth. Over food and drink brought by a servant, the labourers tell the physician a story of a snake discovered in a wine jar. They knew of a man suffering from elephantiasis in a nearby village. Hoping to put the man out of his misery, they had given him the snake-infused wine to drink. To their astonishment, the man did not die, but was cured of his affliction and lived a long life. This, Andromachus tells us, is proof that snakes are useful in curing bodily illnesses.

In the Paris manuscript, a genre scene that has been called 'a figural sampler of agrarian themes' illustrates the story (Fig. 9).⁷⁰ The episode's protagonists, Andromachus the Younger and the servant bearing a wine jar, have been relegated to the upper left-hand corner of the composition. The scene is divided into two stacked registers, each possessing its own earthen ground line. In each register, three male figures (four of them peasants clad only in breeches)⁷¹ engage in cultivation. The labourers of the upper register are tilling the soil and harvesting its yield. Below, a figure guides a threshing device pulled by oxen; two figures bear tools for winnowing and sifting grain. The Vienna *Diryāq*'s illustration of this anecdote is also an agricultural scene, although more abbreviated than that of the Paris manuscript.⁷² It

York, Metropolitan Museum of Art, 57.51.21); reproduced in Ettinghausen 1962, pp. 87–88.

⁶⁶ Both are reproduced in Farès 1953a, pls. XI, XII. It is possible that the Paris *Diryāq* originally contained additional explanatory drawings among its missing folios; Kerner 2004, p. 294.

⁶⁷ All are reproduced in Duda 1992, Farbtafel II, Abb. 33, 34, and 40.

⁶⁸ Kerner 2004, pp. 65–69.

⁶⁹ Kerner 2004, pp. 140–43.

⁷⁰ Farès 1953a, pl. XV; Ettinghausen 1962, pp. 84, 86.

⁷¹ Simpson 1985, p. 133.

⁷² Farès 1953a, p. 36, fig. 11; Duda 1992, Abb. 35.

combines agrarian activity with elements characteristic of banqueting imagery. The picture is framed by trees and two slaves, one of whom tills the soil, while the other bears the wine vessel. The central figural grouping depicts two figures seated for a meal; one holds a glass of wine in his outstretched hand.⁷³ In similar fashion, the *Kitāb al-diryāq*'s two final anecdotes demonstrate the usefulness of snakes against venomous bites and stings, as well as ingested poisons. Andromachus the Younger is depicted only in the first of each set of three illustrations (for example, Fig. 9). Although the physician is physically removed from the action, he literally remains the voice of authority.⁷⁴

The foregoing typology shows that several pictorial modes were used in the illustration of the *Kitāb al-diryāq*. In the most general sense, the illustrations appear to be superfluous. Like contemporary illustrated picaresque works such as the *Maqāmāt*

of al-Ḥarīrī and the *Daʿwat al-aṭibbāʾ* of Ibn Buṭlān, they serve essentially to make books more attractive and valuable.⁷⁵ There does, however, appear to be a discernible correlation between image and text, which would justify a revision of Buchthal's assertion that a text such as the *Kitāb al-diryāq* was merely a pretext for illustration.⁷⁶

In illustrating the front matter of the treatise (disregarding the frontispieces, whose subjects may not necessarily relate to the text),⁷⁷ the 'author portrait'—a relatively popular iconographic type—was adapted. Although portraiture is seldom discussed in relation to early Islamic painting, the figural imagery of the *Kitāb al-diryāq* invites further consideration of the subject.⁷⁸ The author portrait has been defined as 'the visual companion and counterpart to the literary biography.'⁷⁹ In early Islamic manuscript painting, the author portrait was a 'favourite theme' for the frontispieces of learned and literary works including Arabic translations of Dioscorides' *De materia medica*, the *Maqāmāt* of al-Ḥarīrī, and the *Mukhtār al-hikam wa maḥāsīn al-kalim* of al-Mubashshir ibn Fātik.⁸⁰ The placement of author portraits, usually at the beginning of a work of direct or indirect classical derivation, was an emphatic statement of their subjects' 'celebrated personalities.'⁸¹

The physicians' portraits of the *Kitāb al-diryāq* manuscripts may be considered author portraits only with a few qualifications. They do not portray the book's author(s), with the possible exception of Galen. Their placement within the manuscripts is also atypical for books of their time period; they follow both the frontispiece(s) and the treatise's title. Galen is called *al-ḥakīm al-fāḍil*, 'the distinguished physi-

⁷³ Analogies for such agrarian themes are found primarily in Northern Mesopotamian metalwork; such genre scenes detailing everyday life are associated in particular with inlaid objects bearing the epithet (*nisha*) *al-Mawṣilī* ('of Mosul') even though Mosul may not have been their actual place of manufacture. One example, now in the Cleveland Museum and dated 1223 CE (56.11), is decorated with labourers plowing with paired oxen, and gardeners with spades. See Ettinghausen, Grabar, and Jenkins-Madina 2001, 247, figs. 406–07 and Rice 1957. The association of genre scenes with Northern Mesopotamian metalwork has been used by scholars including Kurt Holter and Richard Ettinghausen as support of a similar attribution for the illustrated *Kitāb al-diryāq* manuscripts. Holter 1937a; Ettinghausen 1962, 83–86. However, it has more recently been determined that the genre tendency was not localized. For a fuller discussion of the genre scene and the issue of provenance, see Kerner 2004, 229–32, 259–75.

⁷⁴ Michael Barry recently interpreted an enthroned figure in one of the Paris *Kitāb al-diryāq*'s narrative illustrations as a 'Muslim prince,' the 'ruler to whom this manuscript is dedicated'; Barry 2004, pp. 56–57. The royal figure, however, appears not on the manuscript's frontispiece, as Barry supposes, but in the text illustration of Andromachus the Younger's final anecdote. The figure is a pre-Islamic king with the (quasi-)Greek name Bathūlūs. The anecdote tells the story of the poisoning of the king's favourite slave with opium. The slave was locked in a garden pavilion, and, astonishingly, cured when bitten by a snake. The anecdote may be related to one of several anecdotal cures of Galenic origin, such as one in *De locis affectis* in which Galen explains how he was able to cure a royal slave with theriac. Galen, *De locis affectis* 5.8 (8.355K.), quoted in Stein 1997; Kerner 2004, pp. 88–89, 143. The first of the three anecdotes of Andromachus the Younger, in which a man is cured of elephantiasis with snake-infused wine, has a clear Galenic model; Kerner 2004, pp. 140–42.

⁷⁵ The *Daʿwat al-aṭibbāʾ* was composed in 1058 by the Christian physician and theologian for Nāṣir al-Dawla Aḥmad ibn Marwān, *amīr* of Mayyafariqīn and Diyār Bakr. Grabar 1984, p. 149; Institut du monde arabe 1996, p. 69, no. 20; Ettinghausen 1962, pp. 143–44.

⁷⁶ Buchthal 1942, p. 33.

⁷⁷ On the frontispieces' iconography, see Kerner 2004, pp. 207–28.

⁷⁸ For an assessment of the theoretical and practical aspects of portraiture in Persian Islamic art, see Soucek 2000.

⁷⁹ Hoffman 1993, p. 14.

⁸⁰ Hoffman 1993, p. 6 and Figures 1a–b, 2, and 6a–b. The author portrait 'seems to have disappeared' in Arab-Islamic manuscript painting after about 1300 CE. Grabar 1984, p. 23.

⁸¹ Hoffman 1993, p. 12.

cian-philosopher,' in the title of the *Kūtāb al-diryāq*. In the Paris manuscript, the scribe referred to the book's portraits at the conclusion of the title, writing that the nine physicians 'are the nine philosophers whom we have painted/drawn.'⁸² The physician portraits of the illustrated *Kūtāb al-diryāq* may be understood, then, as affirmations of the belief in the authoritative scholarship of the text (regardless of its apparent pseudographic attribution). By their placement in the manuscripts' front matter, they exert an ancient imprimatur over the treatise's contents. The construction of the physicians' identities was dependent on the commemoration of their names, which are 'usually considered an essential aspect of portraiture.'⁸³ The inscription of the physicians' names above or alongside their portraits ensured their proper identification as historical personages, medical authorities, and contributors to the development of the theriac.

The overall presentation of the physicians is relatively consistent throughout both illustrated *Kūtāb al-diryāq* manuscripts. The physicians are more or less generic figures 'conventionally symbolised'⁸⁴ by the addition of attributes indicating status and profession. Each is represented as a learned figure or *ḥakīm* by his posture, bearded appearance and the self-explanatory books, bookstands, lamps, mortars, and pestles. Although Muslim painters were 'aware of the connection drawn in antiquity between physiognomy and portraiture,'⁸⁵ such descriptions are absent in the *Kūtāb al-diryāq* and seem to have played no part in the book's illustration. The figural imagery adheres to the stylistic conventions and representational modes of the time—hieratic scale, generalization of facial features, and Islamicizing costume. Because the manuscripts' painters likely lacked close prototypes for their ancient subjects, the portraits may be described

as 'exemplary portraits'⁸⁶ of the idealized sage.⁸⁷ The physicians were thus commemorated long after their deaths, not in the manner of icons or Roman and Egyptian portraiture, but as embodiments of the 'social ideal[s]' of knowledge and wisdom.⁸⁸

The text illustrations afforded new, more complex, possibilities for the depiction of the ancient physicians. The explanatory drawings depict the practical application of their knowledge, underscoring the treatise's medicinal content and relating the manuscripts to a longstanding illustrative idiom in Greco-Arabic scientific works. In contradiction to their presumed role as practical aids to understanding a text, stock formulae for explanatory drawings developed early in the history of manuscript illustration.⁸⁹ Although they became somewhat independent of a particular text, their presence appears to have been expected in illustrated books describing the preparation of medicinal remedies.⁹⁰

In the *Kūtāb al-diryāq*'s four anecdotes, the two physicians named Andromachus learn of the therapeutic qualities of substances that became theriac ingredients (laurel berries and snakes). These stories reinforce the treatise's chronological/biographical form, as anecdotes were an integral part of biographical writing in ancient, Arabic, and later Western practice.⁹¹ In visual terms, the anecdotes elicited original narrative images whose iconography was totally reliant upon

⁸⁶ On the distinction between 'idealizing' and 'realistic' likenesses (especially as it pertains to Western art), see Woodall 1997, p. 2.

⁸⁷ The ancient sage was assimilated not only as a figural type that became fully Islamicized in appearance and dress, but in compositional designs including the group portrait, which may derive ultimately from the serial portraits of famous men in Varro's *Hebdomades* of the first century BCE. Weitzmann 1959, pp. 116–27.

⁸⁸ Brilliant 1991, p. 37.

⁸⁹ Grabar 1984, p. 3. The inclusion of figural images in Arabic herbals is documented as early as the third quarter of the eleventh century CE, while the earliest extant Greek herbal to include figures dates to the sixth century. Herbals, especially that of Dioscorides, may have required illustration from the time of their composition. Sadek 1983, p. 64; Weitzmann 1952, pp. 253, 265; Ettinghausen 1962, p. 88; Kadar 1978, pp. 37, 49.

⁹⁰ A similar condition applies to the 'scientific' illustrations (i.e. the representations of the snakes in both illustrated manuscripts and the herbal pages of the Paris *Diryāq*); Kerner 2004, pp. 232–39.

⁹¹ Young 1990, p. 180.

⁸² This textual reference is unique to the Paris *Kūtāb al-diryāq*; for the transcription, see Kerner 2004, p. 48.

⁸³ Brilliant 1991, p. 29.

⁸⁴ In her introductory essay to *Portraiture: Facing the Subject*, Joanna Woodall cited medieval royal figures, whose status was determined by their coats of arms, as an example. Woodall 1997.

⁸⁵ Physiognomic descriptions do appear in treatises such as the *Mukhtār al-ḥikam* of al-Mubashshir ibn Fātik, which is usually classified as a work of gnomologia, but shares its format with the *Kūtāb al-diryāq*. On the subjects of physiognomy and portraiture, see Soucek 2000, esp. pp. 104–05.

the text they illustrate, since their subjects are virtually unintelligible without a literary referent.

The illustration of all four anecdotes in both illustrated manuscripts is the strongest evidence supporting the existence of a shared pictorial program specific to the *Kūtāb al-diryāq*. Admittedly, in the absence of precise earlier or later examples, the existence of such a program may be difficult to substantiate. However, each illustrated manuscript contains only one figural composition outside the directly chronological portion of the text. One is an ‘inhabited’ herbal page in the Paris *Diryāq*, and the other is a serpent-hunting scene in the Vienna manuscript.⁹² It is curious that neither manuscript includes explanatory drawings illustrating the recipes near the treatise’s conclusion. The selectivity of the text’s illustration suggests that the treatise’s biographical/chronological form played a role in its illustration. However, neither biographical nor toxicological literature actually required illustration. While the flowering of book illustration in the Arab-Islamic world coincided with the peak in popularity of the biographical genre in Arabic literature during the twelfth and thirteenth centuries, manuscript evidence demonstrates the concurrent production of both illustrated and unillustrated copies of the *Kūtāb al-diryāq*. It also seems unlikely that the impetus for the production of such elaborate copies of the *Kūtāb al-diryāq* was the subject of the theriac alone; any number of ‘didactic’ (or strictly scientific) theriacal treatises was in circulation, none of which is known to have been illustrated.⁹³ Although it cannot be

said that the *Kūtāb al-diryāq* required illustration, it is clear that when the text was illustrated, appropriate iconographic choices were made. These choices, based on exigencies of the text, suggest an open cycle of portraiture.

The creation of ‘luxury’ copies of the *Kūtāb al-diryāq* may actually stand in support of their proposed Northern Mesopotamian attribution. Although the Vienna *Diryāq* lacks a colophon, Kurt Holter proposed the *atabeg* Badr al-Dīn Lu’lu’ (r. 1233–59 at Mosul) and the Ayyubid Sultan Nāṣir II Yūsuf (r. 1237–60 at Aleppo and Damascus) as its patron, based on stylistic and iconographic affinities with other artistic media.⁹⁴ The Paris *Diryāq* was originally attributed by Farès to the ‘School of Baghdad,’⁹⁵ but the Vienna manuscript’s Northern Mesopotamian attribution was later extended to the Paris manuscript.⁹⁶ Although the Paris manuscript’s colophon and dedication pages name both a scribe and the person for whose library the manuscript was intended, little is known about either figure, and no mention is made of a place of manufacture.⁹⁷

Supporting the Northern Mesopotamian attribution are factors both literary and historical. In medieval Islam, Northern Mesopotamia formed part of a geographic entity known as the Jazīra (‘island’); the region is today divided between eastern Syria, northern Iraq, and southeastern Turkey. In the twelfth and thirteenth centuries, the region underwent sweeping socio-political, economic, and artistic changes. Relative political stability (though not hegemony) and prosperity characterized the numerous Turkic and Kurdish Seljuq ‘successor states’ that

⁹² In one of the Paris manuscript’s twelve herbal pages, a male figure extracts the oil of the balsam tree. For a reproduction, see Farès 1953a, pl. XVIII or Bibliothèque Nationale de France 2001, p. 130, cat. no. 93. The snake hunt is illustrated in the herpetological tract in the Vienna *Kūtāb al-diryāq*; for a reproduction, see Duda 1992, Abb. 39. In addition to its unique iconography, it clarifies a common misperception—namely, that snake venom was an ingredient in the theriac. While venom is the basis for modern antidotes to snakebite (antivenins), it is not found in any theriac recipe in the *Kūtāb al-diryāq*. Rather, the text illustrated states that the snakes were made to bite into leather dolls. After discharging their venom, the snakes would tire, making them easier to handle. Kerner 2004, pp. 113–20, 178, 195–96, 243–44, and 345.

⁹³ Among them are two undated copies of the *Kūtāb al-munqidh min al-halaka fi daf’ maḍārr al-samā’im* (alt. *al-sumūm al-muhlika* (Book on the deliverance from danger in the warding off of dangerous poison(s)) of Ibn al-Mubārak (fl. c. tenth century CE) in the Chester Beatty Library, Dublin (MS 3795, probably eleventh century, and MS 4525, likely

thirteenth century); Arberry 1955–63, vol. IV, p. 14 and vol. VI, p. 9. Another manuscript, dated 784/1384, is in Paris (Bibliothèque Nationale, *arabe* 6562). The text quotes from a number of leading medical authorities, including Galen, on the subject of poisoning and animal bites. See also Ullmann 1970, p. 337.

⁹⁴ Holter 1937a, p. 1; Holter 1937b, p. 92.

⁹⁵ Farès 1953a, p. 2.

⁹⁶ Buchthal 1939, pp. 146–47; Ettinghausen 1962, p. 86 ff.

⁹⁷ The manuscript was made ‘for the library of the learned *imām*, the most excellent, the most perfect, the prestigious, the glory of the faith, the glory of Islam, reinforcement of the *imāms*, king of the *‘ulamā’*, Abī al-Faṭḥ Muḥammad, son of the *imām* Jamāl al-Dīn Muḥammad, son of the blessed *imām* Abī al-Faṭḥ, son of the rightly-guided *imām* Abī al-Ḥasan, son of the useful *imām*.’ Kerner 2004, pp. 304–05.

grew up and flourished at the time.⁹⁸ The region's prominence is personified by such charismatic rulers as the Zangid sovereign Nūr al-Dīn (r. 1146–74), Ṣalāḥ al-Dīn (the famed Saladin of the Crusaders, 1138–93), and the aforementioned *atabeg* Badr al-Dīn Lu'lu'. The Jazīra was truly multi-cultural, reflecting its diverse population. Architecturally, the pluralistic Jazīran culture is credited with the development of a 'classicizing' style of stone architecture patronized by various princes.⁹⁹ The so-called 'classical revival' extended to the intellectual sphere as well; twelfth- and thirteenth-century Jazīran rulers displayed great interest in works of applied science, both Greek and classically inspired, as well as biography. The Artuqid Sultan Nāṣir al-Dīn Maḥmūd (r. 1200–22), for example, commissioned his court engineer, al-Jazarī, to compose a treatise on automata of which several manuscript copies survive.¹⁰⁰ New Arabic translations of the *De materia medica* of Dioscorides were undertaken for the Artuqid rulers Fakhr al-Dīn Qarā Arslān (r. 1148–74 at Ḥiṣn Kayfā) and Najm al-Dīn Alpī (r. 1152–76 at Mayyafariqīn).¹⁰¹

Although it has also been suggested that the *Kitāb al-diryāq* could have been composed at the behest of the Zangid Nūr al-Dīn Arslān Shāh I, there is no compelling evidence for the assertion.¹⁰² It is known, however, that rulers of the period were interested in biographical writings as well as the natural and applied sciences. Ṣalāḥ al-Dīn's son, Ghāzī, who

was given the city of Aleppo in northern Syria by his father in 1186, ruled under the name al-Malik al-Zāhir until his death in 1216. During this time, Aleppo enjoyed the prosperity of the region and the city became renowned for its brilliant literary and intellectual life.¹⁰³ A large, elaborately illuminated copy of Ibn Buṭlān's *Taqwīm al-ṣiḥḥah* (*Tables of Health*) in the British Library (Or. 1347) is dedicated to al-Zāhir's library.¹⁰⁴ The treatise relied on ancient medical authorities for its forty tables outlining dietetics and health. During al-Zāhir's reign, and perhaps even at his request, a biographical dictionary of notable persons connected with the city of Aleppo was begun by the local historian and copyist Ibn al-ʿAdīm.¹⁰⁵

While the above should not be construed as proof of a northern Syrian provenance for the illustrated *Diryāq* manuscripts, or as substantiation of Ettinghausen's proposal of 'Mosul School' workshops in Aleppo, they offer a new direction for future research. For the purposes of this study, it is more reasonable to consider the illustrated *Kitāb al-diryāq* manuscripts as reflections of the period's wide-ranging literary interests, and as encapsulations of the rich and varied intellectual and artistic climate of the Syro-Mesopotamian region.

While it is impossible to definitively localize the Paris and Vienna *Kitāb al-diryāq* manuscripts based on the current state of knowledge, the following conclusions seem clear. The *Diryāq* illustrations, like the text itself, suggest an abandonment of the simplistic taxonomy (the strict division between 'scientific' and 'literary' writings) of classical times.¹⁰⁶ They display a close structural relationship between text and image, as well as a causal relationship between literary form, content, and image. The inclusion of illustrations in the *Kitāb al-diryāq* suited the artistic climate of the time; the 'exemplary' portraiture of their figural

⁹⁸ These included the Artuqids of Diyār Bakr (c. 1098–1232), the Zangids in northern Syria (1127–1222), the Ayyubids of Syria and Egypt (1169–1220), and the Seljuqs of Rum (Anatolia, c. 1070s–early fourteenth century). In Baghdad, the Abbasid caliphate enjoyed a revival in the period between 1100 and 1250; Hillenbrand 1985, p. 10.

⁹⁹ Hillenbrand 1985, p. 13. Terry Allen saw the classicizing trend in Artuqid and Zangid architecture as evidence of a deliberate revival of classical Antiquity: Allen 1986.

¹⁰⁰ The earliest of fifteen manuscript copies is dated 602/1206 (Istanbul, Topkapi Palace Library, Ahmet III, 3472); Rachel Ward has suggested that, despite the ancient sources (such as Heron and Apollonius of Byzantium) upon which the author drew, the manuscripts' illustrators employed the contemporary style of narrative painting. Ward also suggested the existence of a 'school of narrative painting' responsible for manuscripts including illustrated copies of the *Maqāmāt* (i.e., Paris, Bibliothèque Nationale, arabe 3929). Ward 1985, pp. 69–80.

¹⁰¹ Sadek 1983, pp. 7–13. The former translation is preserved in a manuscript in Paris (Bibliothèque Nationale, arabe 4947); the latter is preserved in the Mashhad Dioscorides; Day 1950, p. 274.

¹⁰² Öney 1976, p. 198.

¹⁰³ Sauvaget 1999. Al-Zāhir undertook an ambitious building campaign that included the refortification of the Aleppo citadel in the early thirteenth century; among the renovations were the triple 'bent' entrance, towers, water tanks, and a mosque. A carved stone relief of interlaced dragon-headed snakes similar in anatomy to those of the Paris *Kitāb al-diryāq*'s double frontispiece decorates the citadel. For the relief, see Ettinghausen, Grabar, and Jenkins-Madina 2001, p. 230, fig. 375.

¹⁰⁴ Hamarneh 1975, p. 117.

¹⁰⁵ Morray 1994, pp. 10, 145; Ibn al-ʿAdīm 1986–90.

¹⁰⁶ Weitzmann 1952, p. 266.

imagery commemorated the wisdom of the ancient physicians in both word and image.

The *Kitāb al-diryāq* was not intended for a general audience; instead, its reader would likely have been a specialist in science and/or medicine.¹⁰⁷ It may one day be possible to attribute the serial portraiture of the illustrated *Kitāb al-diryāq* to a 'process of emulation' that was mirrored in the complementary literary process by which the treatise was attributed to Galen.¹⁰⁸ For now, though, the illustrated *Kitāb al-diryāq* manuscripts stand as paradigms of the convergence of art and intellect. In illustrating a classically inspired work of medico-biographical literature, the artists of the Paris and Vienna manuscripts made manifest the enlightened intellectual climate and glorious visual culture of the medieval Islamic world.

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¹⁰⁷ Kerner 2004, pp. 121–22 and 257, n. 179.

¹⁰⁸ Kerner 2004, p. 257, n. 178.

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TEXT AND ILLUSTRATIONS. DIOSCORIDES AND THE ILLUSTRATED HERBAL IN THE ARAB TRADITION

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Dioscorides was probably an older contemporary of Pliny the Elder (23–79 CE). He is often stated to have been a military physician, though there is no conclusive evidence for this; but if so he may well have served on Roman campaigns in Syria and Egypt. His text, which, unlike so many biological and astronomical works of the 1st century CE, is in prose, not verse, was a compilation, with critical commentaries on Theophrastus, Hippocrates and other doctors or botanists, and owed a considerable amount to two earlier illustrated herbals, by Cratevas (1st century BCE) and by a Roman predecessor of the previous generation, Sextus Niger. His work also contains paraphrases of two works of the later 2nd century BCE attributed to Nikander, the *Theriaka* and the *Alexipharmaka*; the *Halieutika* of Oppian, a treatise on fish and fishing; and the *Ornithiaka* of Dionysius of Philadelphia on birds. Though the relevance of these last two works to *Materia Medica* is not self-evident, in the Juliana Anicia codex in Vienna, the most famous of all illustrated Dioscorides manuscripts, the

illustrations are highly realistic¹ (Figs. 1–3). This also contains a polyglot lexikon of plant names, a wise precaution, in view of the danger of misidentification of the plants in question, based on a botanical lexikon of c. 50 BCE by the Alexandrian, Pamphilos. It had been re-arranged in alphabetical order at some later date prior to Oribasius (325–403 CE), the personal physician of the emperor Julian the Apostate. To the five indisputably genuine books of the *De Materia Medica*, *De venenis* and *De venenatis animalibus* are sometimes added, but they did not disguise the primary importance of the main text, which describes the material in such detail that even now the great majority of the plants described by Dioscorides can be identified with near certainty.

In this paper I shall limit myself to the role of Dioscorides' work as one of the founders of the herbalistic tradition in Islam. In the Greek Dioscorides text the actual appearance of the plants takes second

* Author's note. I am deeply grateful to Dr. Anna Contadini for her encouragement in writing up this contribution, which went to the length of locating an earlier study of mine on the subject the whereabouts of which I had long forgotten.

¹ Mazal 1981. Emilie Savage-Smith has remarked to me the curious fact that although by the Islamic Middle Ages the Dioscorides text had been rendered more or less obsolete by the works of herbalists like Ibn al-Bayṭār and al-Ghāfiqī it continued to attract the lion's share of illustration. This may have been, of course, for non-scientific reasons.

place to the gathering and preparation of drugs and potions, and Otto Mazal considers it probable that the original text was not illustrated. Contemporary illustrated herbaria were known, however, for Pliny (Nat. Hist. 25) states that not only Kratevas but Dioscorides and Metrodorus depicted plants attractively, with the description of their properties below, though the depictions were, in his view, unreliable because of their vivid polychromy, which made it difficult to guarantee their accuracy and was an obstacle to other copyists (who, he evidently assumed, would not have had access to herbarium specimens).² The Vienna Dioscorides (made as an offering to the church of the Virgin in Pera/Honorata) is the first surviving copy in which the herbal and the pharmacological traditions are combined.³ The illustrations, however, instead of supplementing the text, here take first place, the text being incomplete and alphabetically re-worked so that the entries are little more than labels for the pictures. The variety of subject is such that the possibility that they were all drawn from life is to be excluded: this shows that, in spite of Pliny's objection, there was a reliable tradition of herbals, though their relevance to the actual text of Dioscorides is far from clear.

To state a truism, there is no single relation between a text and its illustrations, even when texts may belong to a single literary genre, here specifically the manual or handbook. This is particularly the case with the *Materia Medica* of Dioscorides, which is not merely a composite text but was also intended for use by a broad spectrum of professionals, including physicians, apothecaries, plant-collectors, dieticians and students of natural (or unnatural) history (Fig. 4). This is true, to a greater or lesser extent, of herbals in general,⁴ which include lists of medicinal drugs of

plant-, animal- or mineral origin and descriptions of their properties and uses, together with descriptions of plants and their habitats and the portions of the plant which are most physiologically active or most efficacious for a particular complaint⁵ (Figs. 5–10). It is clear from this definition that different preoccupations at different times in the history of the text and the varying interests of commentators might be expected to have influenced the character, or even the presence, of its illustrations.⁶

As Stickelberger pertinently remarks in his masterly survey of the scientific manual in Antiquity,⁷ the gulf between textual historians and historians of illustrative traditions remains very largely unbridged, even when text and illustrations are integrally related. My particular interest in illustrations to Dioscorides was first aroused by the striking accuracy of illustrated herbals in Islam, despite the susceptibility of both text and illustrations to corruption through mindless or inexpert copying, rendering either or both useless, if not downright harmful. In one sense, this is historically unproblematic: for such manuals there was a tradition of learned copying, by scribes familiar with the subject-matter and for a readership which was also familiar with it, and, through fieldtrips, physic-gardens and possibly even herbaria,

⁵ This last stipulation is not necessarily blind superstition. The fleshy covering of the berry of the yew-tree (*Taxus baccata* Linn.), for example, is innocuous, if insipid, whereas the kernel is highly toxic. Such was even more strikingly the case with the fruit of the strychnine tree (*Strychnos Nux-Vomica* Linn.), part of which was a highly esteemed tonic and other parts of which were a deadly poison.

⁶ Stannard's comment regarding Albertus Magnus and his scientific works is worth citing in full. (Stannard 1980, p. 358): In herbals the descriptions have commonly been regarded as serving the identification and recognition of therapeutically useful plants such that they can be collected and used appropriately. To what extent the physician, apothecary or herbalist actually relied on written description in order to recognize the plants sought is somewhat unclear. An equally good case may be made for the well-known fact that herbalists, to this day, possess a fund of empirical information on the basis of which they recognize and hence collect the desired plant. The herbal, thus, served other purposes as well, for the description of the plant was only propaedeutic (*sic*) to the preparation and administration of medicaments, the composition of which actually included substances of plant origin. Regardless of which way the descriptions be interpreted, it is clear that Albertus Magnus was not describing plants solely for the purpose of recognizing potentially useful plants for a therapeutic end.

⁷ Stickelberger 1994.

² This tendency to resort to anecdote doubtless explains the anecdotal element in the later illustrated Arabic copies. The majority of the figural illustrations seem to be pointless, or, at least, their heuristic role, either in explicating the text or in otherwise enlightening the reader, is obscure. The illustration of these anecdotal elements was, in Weitzmann's view, a product of the post-Iconoclastic period.

³ An essential adjunct to this is a Dioscorides manuscript in Padua, Seminario Vescovile, cod. 194, which was transcribed in Constantinople c. 1350 by the monk Neophytus from the Juliana Anicia codex and contains miniatures after original illustrations to that manuscript which are now lost. Cf. Stannard 1971, pp. 168–87.

⁴ Stannard 1980, p. 356.

very often with the original material itself, so much so, as to make illustration virtually superfluous. The resulting conclusion, that illustration is only essential when the written description, for whatever reason, is insufficient, contrasts strikingly with the modern 'scientific' view, that botanical illustration not only has no aesthetic purpose but should show clearly the characteristics which make the plant identifiable, with its parts accurately proportioned and with dissected details magnified to facilitate recognition. Such drawings, ideally, make a text unnecessary: our modern expectations from a manual are thus very different from those of a mediaeval scholar.

The value of lexicons thus depended primarily on the accuracy of the textual description and only secondarily on the names, synonyms or medical applications of the plants.⁸ Although Dioscorides' nomenclature was generally adopted by Byzantine physicians, his descriptions were almost invariably abridged by omitting the characteristics by which the plant could be recognised. After Galen, moreover, the compilation of lists became a literary activity, in which scholarship and editorial expertise supplanted a personal knowledge of the plant in its living state. Dioscorides also frequently omits a description, on the grounds that a particular plant is 'known to all'. The result is that in the Byzantine *Materia Medica* lexicographical considerations came almost entirely to displace the botanical data. It soon became evident to the physician that the heavily burdened commentaries, more concerned with grammatical niceties than medical botany, were of little practical use.⁹

In the attempt to identify a native plant from the text two questions immediately arose: was the text reliable? And what was its Greek (or alternatively its Arabic) name? Essentially, four different kinds of medical information are given in the plant lists: that the plant in question possesses therapeutic properties similar to those of another plant; that it possesses those properties to a specified degree; that it alleviates or cures certain specific complaints; or that it pos-

sesses certain physiological properties. It followed that the medical use of the plant was never divorced from its name. The criteria for identification were thus quite heterogeneous, including the comparison of one plant to another; classification as a grass, shrub, bulb, etc.; the ascription of a particular geographical habitat, where it could be obtained or gathered; or an indication of its economic use, e.g. as a dyestuff, such as madder.¹⁰

Though Theophrastus claims to cover the plants of Egypt in his *Peri Phyton*, and the chroniclers of Alexander's Indian campaign included descriptions of exotics like the banyan tree among the marvels of India, few Hellenistic naturalists travelled outside the eastern Mediterranean, and the range of imported exotics into the Mediterranean from the Eastern trade was very restricted. One of the consequences of the revival of the Greek sciences and the growth of the India trade under the cosmopolitan Abbasid caliphs was the need to reconcile the Aristotelian tradition with equally important non-Aristotelian traditions which were different in their emphasis, and to take account of new species and genera unknown to the Greeks. The sources they exploited included the lost Aristotelian *Peri Phyton*,¹¹ Galen and late Alexandrian medical writers, and notoriously apocryphal writers like 'Balīnās', though, curiously, not Pliny's *Natural History*.¹² A complete Arabic translation of Dioscorides was revised by Ḥunayn b. Ishāq (d. 260/873) at the court of the caliph al-Mu'tamid, from a Syriac translation by Stephanos (Iṣṭifān b. Baṣl) from the Greek, one version of which was in alphabetical order with a somewhat revised text. To take account of the new species and genera two textual traditions developed: an eastern version typified by that of al-Ḥusayn b. Ibrāhīm al-Nāḥilī dedicated to Abū 'Alī al-Sanjūrī of Tabaristan, in 380 (990–91); and a western version at the Umayyad court at Cordoba, which adapted the Baghdad version to

¹⁰ Stannard 1980, pp. 355–77.

¹¹ Aristotle's *Peri Phyton*, the original text of which is now lost, was translated by Thābit b. Qurra and was revised by Ishāq b. Ḥunayn (d. 298/910–11 or 299/911–21) under the title *Tafsīr Kūtāb Aristuṭālīs fī'l-nabāt li-Niqūlāus*. Cf. Bouyges 1924.

¹² Contrary to common belief, Pliny was a conscientious naturalist, with much good first-hand knowledge of his material, practical experience and even access to illustrated herbals (XXV 4, 8). Cf. Stannard 1965, pp. 420–5.

⁸ Stannard 1971, pp. 168–87.

⁹ As Stannard 1966, pp. 1–21, says, 'To use Strabo and Pausanias to clear up difficulties in Dioscorides' text may be a sign of scholarship, but one may speculate on the practical benefit derived from Barbaro's observation that *meon* (*Meum Athamanticum* Jacq.) is disyllabic, with the stress on the long *e*.

the specific needs of the Spanish flora and its Arabic nomenclature, drawing upon Latin sources such as Varro and Columella in addition to the Greek-Syriac tradition. No illustrated Muslim manuscript from the western tradition survives; but the need for continuing field-work and for periodic revisions was generally accepted.¹³ This is clearly demonstrated by a copy of Iṣṭifān's translation of Dioscorides,¹⁴ with a note to the effect that it was collated by 'Abd al-Malik b. Abī'l-Faṭḥ and checked by Abu'l-'Abbās al-Nabā'ī, who was the teacher of the early 13th century Málaga herbalist, Ibn Bayṭār.

There is no evidence that the 9th century Abbasid translation was illustrated, or that it depended upon some such illustrated herbal or herbals as inspired the Juliana Anicia codex, and we know nothing of the origins of the illustrative tradition of the orientalisising version. However, in the West the Umayyad ruler 'Abd al-Raḥmān (912–61 CE) received a fine copy (in 337 (948–9), according to Ibn Abī Uṣaybi'a) of the Greek Dioscorides from the Byzantine emperor, Constantine Porphyrogenitus. Since no-one in Cordova, however, had the Greek to understand it, two years later the emperor sent a monk, Niqūla (Nicholaos), who instructed a six-man committee on the unfamiliar terms and created the Spanish-Arabic pharmacopeia. This was written up by Ibn Juljul in Rabī' II 72 (October 982) as *Tafsi'r asmā' al-adwiya al-mufrada min kitāb Dīyusqūrīdūs*.

The evolution of the text and its revision to take account of exotic floras evidently continued in Islam beyond the Middle Ages. Evidence for this is the late Dioscorides manuscript in the Topkapı Saray Library, A. 2147,¹⁵ which comprises two texts: the complete Arabic text revised by Ḥunayn b. Ishāq, copied by 'Alī Ikhtiyār b. Ḥusayn Khurasānī in 866

(1461–2); and a complete Persian text copied by 'Alī b. Sharīf al-Ḥusayn[ī], with a colophon dated 867 (1462–3), and a later date in the Introduction, 869 (1464–5), perhaps recording the execution of the illustrations. The Persian section (fols. 204–475), with 25 lines to the page, is richly illustrated, but not the Arabic text. There are few illustrations with human figures, but the later books have numerous bird- and reptile-figures.¹⁶

One of the works to which the Dioscorides Arabus gave rise was al-Dīnawarī's lexikon of plant-names, the surviving text of which lists 637 plants.¹⁷ The definitions are of various forms, but in at least some cases the descriptions are more botanically detailed and closer to a work of morphological botany than Dioscorides, while reducing reference to the plants' pharmaceutical properties. It is unclear whether it was ever illustrated, but it raises the more general question whether, in illustrated botanical/pharmacological works, all the lemmata are illustrated, and, if not, what were the criteria for including an illustration—though, of course, the answer may merely be, banally, that where no illustration is included none was available to hand. Only detailed textual investigation of manuscripts like Topkapı Saray A. 2147 could resolve this problem.

Illustrating or re-editing the text involved four basic processes. Firstly, lexicography, to clear up confusions in the identification of simples, as in the *Kitāb al-ṣaydala fi'l-ṭibb* of al-Bīrūnī (361–440 (972–1048)). The dangers of misidentification were increased by misplaced dotting or pointing of Arabic letters: up to the 14th century at least, therefore, it was customary to use traditional Greek, Syriac or even Persian names, transliterated into Arabic and, as Nikolai Serikov has observed in an unpublished study of 'tempo' in Arabic calligraphy, clearly written in a loose hand to leave their alien origin in no doubt.¹⁸

¹³ As Ibn Abī Uṣaybi'a (d. 688 (1289–90)) recounts in his *Uyūn al-anbā' fi'l-ṭabaqāt al-aṭibbā'* (Ibn Abī Uṣaybi'a 1882, vol. II, p. 219), the Syrian physician, Rashīd al-Dīn b. al-Manṣūr (c. 1177–1243) was inspired by illustrated texts of Dioscorides to take a draughtsman with him on his field-trips.

¹⁴ Bibliothèque Nationale ms arabe 2489, dated Ramaḍān 616 (November–December 1219). Cf. Leclerc 1867, pp. 5–38. The Iṣṭifān text is in the revision of Ḥunayn b. Ishāq, but with numerous marginal glosses in various Spanish Arabic hands right up to the later 13th century. It is unillustrated but from internal evidence had a separate volume of illustrations.

¹⁵ Grube 1959, pp. 163–94.

¹⁶ A related manuscript, containing, however, only the Persian translation by Ghiyāth al-Dīn Muḥammad Raḍavī, copied and illustrated probably at Isfāhan and dated Jumādā II 1068 (March 1658), is in the library of the Oriental Institute of the Academy of Sciences (IVAN) in St. Petersburg. Cf. St. Petersburg 1995, cat.no.49. This contains, possibly under the influence of European herbals, a number of recognisably depicted exotics, such as pepper and ginger.

¹⁷ Ḥamīdullāh 1973.

¹⁸ There is the additional problem that by the Middle Ages the Arabic equivalents of Dioscorides' names had

Secondly, taxonomic, to discover which plants breed true and which are local varieties, which must have involved field-work and empirical observation, with appropriate revision of the text to take account of the results. Thirdly, economic, distinguishing different qualities of the plant product, detecting adulterants, listing trade-names and finding practical equivalents, the work of a pharmacist-botanist, as reflected in the Greek original and subsequently in the common organisation of Arabic Dioscorides manuscripts into subjects. And, fourthly, the pharmacological task of distinguishing the effects of various species and classifying them accordingly. These four processes would have given rather different results in practical terms, and pharmacists, druggists, herbalists and botanists must often have found themselves confronted with disagreements to which there was no ready theoretical solution. In such cases this makes the illustration of texts of prime importance, as crucial evidence for a definitive identification. They need not have been of high quality, of course: often quite schematic drawings would do, and the presence of such illustrations is therefore not necessarily evidence for the corruption of the illustrative tradition. Practice, then, favoured the illustration of Dioscorides manuscripts. What is on the face of it disconcerting is that, till the European Renaissance at least, only a minority of copies were illustrated, in Late Antiquity, Islam and the West, though perhaps not much more than the lack of illustrated manuals of ichthyology, entomology or herpetology.¹⁹

While only two European Dioscorides incunabula are known, no fewer than seventy eight editions appeared between 1501 and 1600.²⁰ Dioscorides divisions seem mainly inspired by pharmacology (which, of course, often conflicts with a morphological classification), and although there is now general

agreement on his genera and the higher taxa his sub-species remain disputed. The Juliana Anicia codex (which was anyway unfamiliar even to Matthioli) is alphabetical, therefore of no use in reconstructing Dioscorides' Greek text, while the introduction of Arabic drugs and drug-names aroused considerable problems in identifying them. Moreover, the growing popularity of illustrated herbals tended to make his text superfluous.

There was, of course, another source of knowledge, practical cultivation. The idea of scientific works as catalogues of God-given species is one of the most persistent features of the classical works of natural history in Islam and the Middle Ages and arguably played a significant part in the very conservative attitude to the introduction and cultivation of exotics in Islam, as well as defining the scope of physic gardens. Abu'l-Khayr was a late-11th-century author who, Carabaza conjectures on the basis of internal evidence, was supervisor of the 'Royal garden' of the ruler al-Mu'tamid in 11th-century Seville.²¹ His work combines quotation from his predecessors, information from local professionals, and his own personal observation, and although it never appears to have been illustrated it doubtless presupposed illustrated works of other specific types. It seems to go back to a late Antique or Byzantine georgic or geponic tradition, perhaps to the 6th-century Cassianus Bassus Scholasticus, or perhaps to a certain Qusṭūs (possibly to a pseudo-Qusṭūs, 'Alī b. Muḥammad b. Sa'd), who re-worked Cassianus Bassus's text.

Abu'l-Khayr's soubriquet, al-Shajjār ('the Tree Man') indicates that to his contemporaries and successors he was primarily an arboriculturalist, and the detailed account he gives of grafting suggests that he may have been involved in experimental development. He covers, variously, timber-cultivation to olive-growing, grape-growing and fig-growing, orchard trees and garden crops like bananas, and a physic garden, including simples such as the mandrake, thus all gradations from forestry, agriculture and pharmaceutical cultivation to floriculture. The other crops he describes include rice and wheat; vegetables; and garden flowers, including roses, jasmine, carnations, narcissi, saffron, and irises or lilies of various colours. The text presents, however, a

in some cases come to be used for more than one plant, without any clear relation being apparent between them. The 13th century Málaga botanist, Ibn al-Bayṭār's list of identifications for Dioscorides' lemmata, book by book, was in part a response to this.

¹⁹ In the case of entomology at least, this may be explained by the fact that insects are also ignored by Aristotle in his zoological works. Natural history (as opposed to systematic description) evidently attracted the successors of Aristotle in Hellenistic Alexandria less than 'pure' science because of its subordinate relation to medicine and pharmacology.

²⁰ Stannard 1966, pp. 1–21.

²¹ Carabaza 1991, pp. 32–38.

curious problem, that some of the plants and shrubs mentioned could never have been grown in Andalusia and were valued imports from tropical Southern Asia, notably myrobalans (*Terminalia* spp. Linn., a genus of tropical hardwoods, the fruit of which was used in tanning) and the Nux-Vomica tree (*Strychnos Nux-Vomica*).²²

The appearance of the physic garden may be deduced from al-Maqrīzī's account²³ of the garden of the early-15th-century doctor, Faṭḥallāh b. Mu'taṣim al-Dāwūdī at Bayn al-Sūrayn in Cairo, fancily laid out with all sorts of flowers and simples from Syria, which raises, however, the problem of its practical utility. For the extant botanical treatises on simples largely take it for granted that they are to be gathered in the wild—perhaps because of the belief that under cultivation they may lose much of their efficacy. Either because of the strength of the India merchants' monopoly, or because of restrictive practices by the indigenous cultivators, or perhaps because of a deeply rooted belief that climate and native habitat had a crucial influence upon the properties of drugs and spices, there is practically no indication that attempts were ever made to grow costly exotics²⁴ nearer at hand. This despite the obvious conveniences of cultivation, where the crop could have been harvested, free from the risks attending the sea trade or other forms of disruption, which could have been exploited by the Abbasid caliphate to establish a virtual monopoly of production.

I should like to finish by considering a type of illustration, unrelated to Dioscorides but of some theoretical interest, which is sui generis, but which encapsulates the heuristic problems of scientific illustration in Islam.

This is the Banū Mūsā's treatise on automata, which so far is the only surviving example of a mainly pneumatic or hydraulic tradition in Islam.²⁵ Its models exploited both aerostatics and hydrostat-

ics, using devices such as self-operating valves, timing devices, delay systems, differential viscosities and specific gravities, and concentric syphons. It was widely popular and copies were in circulation as late as the 14th century. It seems to have had no successors, not so much, perhaps, because it left little room for development and left both Hero and Philo, its progenitors, far behind, but because the instructions for the machines were more economically conveyed orally from craftsman to pupil than by a manual.

The illustrations of the Banū Mūsā's treatise raise problems with the 2-dimensional representation of 3-dimensional space, because if the parts are wrongly located in the drawing the machine will not work. That the illustrations did not lead up blind alleys must be because those who read the text were already highly familiar with it and skilled in practical engineering. This makes it unimportant that the illustrations were not to scale: what was essential was the placing of the components, the size then being determined by trial and error. Significantly, for their Model 13 the text mentions an improved version, though it is neither described nor illustrated, as being 'too difficult'.

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²² Laufer 1919, pp. 448–50.

²³ Behrens Abouseif 1987, p. 27.

²⁴ A possible exception is the cultivation of the clove (cf. Ashtor 1978) which, though apparently confined to the Moluccas till the Middle Ages, was subsequently planted in quantity in Zanzibar.

²⁵ Hill 1978. No fewer than three manuscripts of this are known, that in the Topkapı Saray Library, A. 3473, of the early 13th century, being the best.

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ELUSIVE GIRAFFES: IBN ABI L-ḤAWĀFIR'S *BADĀ'Ī' AL-AKWĀN* AND OTHER ANIMAL BOOKS

Remke Kruk

Books about animals figure prominently in studies on Islamic art, and art historians, along with many philologists, have to grapple with the usually very complicated text traditions of bestiaries. Here, I will focus on some texts from the *manāfi' al-ḥayawān* genre that hitherto have received little attention.

The following topics will be dealt with: firstly, I will discuss an unpublished and fairly unknown Arabic *manāfi'* text, Ibn abi l-Ḥawāfir's *Badā'ī' al-akwān fī manāfi' al-ḥayawān*. No illustrated manuscripts of this text are known to me. This in itself raises the question: was it never illustrated, and if so, why not? Might the reason be that the contents of this text are basically different from those belonging to the much-illustrated Ibn Bakhtūshū' tradition?

My second point concerns the amount of overlap in contents between animal books. The impression one gets when working with this material is that one rarely reads anything that one has not seen before. Impressions, however, may be deceptive, as the analysis of even a small sample will demonstrate.

The third point deals with the texts circulating under the title *Na't* (or *Nu'ūt*) *al-ḥayawān*, and shows the substantial differences that exist between the *Na't al-ḥayawān* which is part of the framework of the Ibn Bakhtūshū' tradition and that of the independent *Na't al-ḥayawān* manuscripts, hitherto practically unstudied.

Fourth, I will present a brief case history illustrating the points that will precede it. The animal chosen for this purpose is the giraffe.

I. IBN ABI L-ḤAWĀFIR'S *BADĀ'Ī' AL-AKWĀN FĪ MANĀFI' AL-ḤAYAWĀN*¹

Jamāl al-dīn 'Uthmān ibn Aḥmad Ibn abi l-Ḥawāfir's *Badā'ī' al-akwān fī manāfi' al-ḥayawān* ('Rarities of Beings; about the uses of living beings') is a work exclusively devoted to the *ḥayawān*, living beings.

Several manuscripts of the text are known.² No illustrated copy is known to me. The manuscript that I used for the present purpose is Chester Beatty 4352, dated 725 (1325), 144 fols.

I will give an idea of its contents and try to show how the work fits into the general framework of Arabic zoological texts. In my search for relevant information, I have consulted a wide range of zoological texts representing the main strands in zoological literature. I fully realize of course that I have by no means exhausted the field. References in this article

¹ Part of the information on the *K. al-Badā'ī'* presented here is based on the unpublished MA thesis by Klerk (1993).

² Ullmann 1972, p. 33, note.

are to the texts that turned out to be most relevant for the present discussion.³

I concentrated on the following main branches: *adab*, as represented by Jāhiz; the encyclopaedic, as represented by Qazwīnī's *ʿAjāʾib*; the *manāfiʿ al-ḥayawān* tradition, as represented by the combined Ibn Bakhṭīshūʿ/*Naʿt al-ḥayawān* texts; and the independent *Naʿt al-ḥayawān* text.

The author

Not much is known about Ibn abi l-Ḥawāfir. He probably lived in Cairo, possibly also in Damascus, and died in 701 (1301).⁴ Ibn abi l-ʿUṣaybiʿa does not mention him, but has entries on both his father Faṭḥ al-dīn Aḥmad al-Qaysī ibn abi l-Ḥawāfir, who wrote a book about eye diseases for the Ayyubid sultan al-Ṣāliḥ Najm al-dīn (r. 637–647/1240–49),⁵ and on his grandfather Jamāl al-dīn ʿUthmān ibn abi l-Ḥawāfir (d. 595/1198). The latter was a well-known physician, and a colleague of ʿAbd al-Laṭīf al-Baghdādī, whose (lost) animal book is often quoted by Ibn abi l-Ḥawāfir. Ibn abi l-ʿUṣaybiʿa, in the entry on his own uncle, Rashīd al-Dīn, mentions that he studied with both these renowned scholars (Ibn abi ʿUṣaybiʿa 1184: II, 249–50).

Nature of his Badāʾiʿ al-akwān

Ibn abi l-Ḥawāfir says that his book is a compilation of what physicians and other learned men have said and experimentally found out—a reference to the *mujarrabāt*—about the medico-magical properties (*khawāṣṣ*, *virtutes*) of animals, arranged in alphabetical order to make it easy to consult.

In this manner he treats some 100 animals. As is usual in such texts, each entry is divided into two parts: that of the *ṭabāʾiʿ* and that of the *manāfiʿ wa-khawāṣṣ*, medical and occult properties.⁶ Slightly contrary to alphabetical order, but not unusual in this genre, he starts with man, to which quite a long entry is devoted, in which, for instance, the human soul and the different parts of the body are discussed.

The part on the *khawāṣṣ* of human beings is remarkably long. It not only speaks about useful applications of various parts of the human body, especially its waste products, but also about such occult properties as the following: if a man who has fever puts on clothes worn by a woman who is recovering from childbirth (more properly, a woman who is still in her period of *nifās*, lochia) without washing them first, the fever will disappear (fol. 4v); if a menstruating woman passes an active man, his energy will vanish (fol. 8v); if she enters a house where new wine is being processed, it will go bad (id.).

The next entry then deals with the lion (*asad*), all in accordance with the usual practice in bestiaries. Subsequently the other animals are dealt with, some of them in the course of generic entries such as ‘worms’, ‘snails’, ‘fish’ or ‘mice’. Such generic entries pay ample attention to general matters that are relevant to that particular group of animals, as in the case of fishes, where the author makes extensive use of what Ibn abi l-Ashʿath, a 10th-century author, has to say on the subject.⁷ Aristotle is also cited by name here regarding the spontaneous generation of fishes (H.A. 569a25–9; 570b19–23) and the homogeneous character of the fish egg (H.A. 754b23).

Ibn abi l-Ḥawāfir devotes separate entries to skin and salt, and there is also an entry on pearls.

Although most of the material is taken from other sources, occasional personal remarks do liven up Ibn abi l-Ḥawāfir's account, such as his comment that

³ The following texts were consulted but not included in the references: Ibn abi l-Ashʿath (d. 970), *K. al-ḥayawān* (MS Oxford, Bodl. Hunt 534/6); Ibn Qutayba, *ʿUyūn*; al-Tawḥīdī, *Muʿāṣasa*; al-Gḥarnāṭī, *al-Muʿrib*; al-ʿUmarī, *Masālik*; al-Ghuzūlī, *Maṭālib al-budūr*; al-Qalqashandī, *Ṣubḥ*; al-Nuwayrī, *Nihāya*; al-Damīrī, *Ḥayāt*; Persian sources: Muḥ. ibn Maḥmūd Hamadānī (= Muḥammad-i Tūsī), *ʿAjāʾib al-makhlūqāt*; al-ʿAwfī: Muḥammad Nizām ud-Dīn, Introduction to the *Jawāmiʿu l-Hikāyat*; Mustawfī al-Qazwīnī, *Nuzḥatu-l-qulūb*, tr. Stephenson; MS Leiden Or. 713, an abridgment of *Mujarrabāt al-Khawāṣṣ* by Zuhr b. ʿAbd al-Malik ibn Zuhr al-Ishbīlī, to which Prof. J. J. Witkam kindly drew my attention.

⁴ Ullmann 1972, pp. 33–4.

⁵ Ullmann 1970, p. 212.

⁶ Hees 2002, p. 240 suggests that this pattern is first encountered in the Persian cosmography of Shahmardān, *Nuzḥatnāma-i ʿAlāʾī*, written ca. 1100 AD (Hees 2002, p. 107) and was subsequently, possibly via Qazwīnī, taken over by the Arabic tradition. It is, however, already present in separate *Naʿt/Nuʿt al-ḥayawān* texts discussed below, and in the *K. Ṭabāʾiʿ al-ḥayawān* of Marwazī, a contemporary of Shahmardān. Marwazī's book was written after 1124/25.

⁷ Kruk 2001a.

he had always considered the story of the hare's bi-annual change of sex a fable until he saw it confirmed by a (correctly cited) passage in the *Kāmil* of the historian Ibn al-Athīr (d. 630/1233), which told how somebody caught a hare that possessed both male and female genitals. The veracity of the story was further confirmed by Ibn al-Athīr's account of a girl in his household who after reaching puberty had started to develop male physical characteristics such as a penis and a beard.

Sources

Most of Ibn abi l-Ḥawāfir's zoological lore is familiar from older sources, which are sometimes, but by no means always, mentioned explicitly. A list of the authors quoted will be given in Appendix I.

If Ibn abi l-Ḥawāfir mentions his source, he usually does so by the author's name, and only in three cases by title also: Abū 'Ubayd al-Bakrī with his *K. al-mamālik wa-l-masālik*, Abū 'Ubayd al-Harawī with his *K. Gharīb al-Muṣannaḥ*, and Jāḥiẓ with his *K. al-ḥayawān*. Many names come up in the *tabā'ī* parts of his entries, which have a distinct literary aspect. Poets, as well as and historical works, are frequently cited. A considerable number of medical authors are quoted in the *manāfi* and *khawāṣṣ* parts. There are some noteworthy absences, such as Ibn Bakhtīshū's *Manāfi' al-ḥayawān* and Qazwīnī's *Ajā'ib al-makhlūqāt*. As to Ibn Bakhtīshū himself, even though there are no references to him in the text, he and his son 'Ubayd Allāh are mentioned in the list in the colophon (fol. 143v) where the author sums up the authors from whose works he has drawn his material. The list starts with Jāḥiẓ, Aristotle and Ibn abi l-Ash'ath as the three most prominent. This is noteworthy, because these are the same three that are always mentioned in the sources in connection with 'Abd al-Laṭīf al-Baghdādī's book on animals, no longer extant.

As in most of these works, the quality of the source references is uneven. Some may come directly from the sources (like those attributed to Ibn abi l-Ash'ath, which usually agree word for word with the author's *K. al-Ḥayawān*); others, such as many of the explicit Aristotelian references, belong to a standard set of Aristotle quotations handed down by the secondary tradition. Of the 18 references to Aristotle, 15 can

at least partly be traced to the *Historia Animalium*.⁸ There are the familiar remarks about the essential similarity of the crocodile and the skink, which are considered respectively as the water- and the land-form of one and the same animal: which of the two will develop out of the egg depends on whether the newly hatched reptile finds itself in the water or on firm ground. Also among the crocodile lore is the familiar story about the birds that come to clean the reptile's teeth (cf. Aristotle, *Historia Animalium* 612a21), a typical instance of Aristotelian tradition that, as so much, was passed on without awareness of its source.

The pseudo-Aristotelian lore that so prominently figures in the combined Ibn Bakhtīshū'/Na't al-*Ḥayawān* tradition is also well represented. The three untraceable quotations of the 18 mentioned above belong to this tradition. Usually, however, they are anonymous, as may be illustrated by the pearl section. Pearls were always a point of debate in medieval sources, some authors considering them to be of vegetable provenance and others coming up with complicated stories about dewdrops and pearl oysters. Ibn abi l-Ḥawāfir opts for the latter. He tells us (fol. 125v) that pearls grow in 'an animal that is called *astūdūs* (a common corruption of the Greek *ostreon*). The flesh of the animal is black, and two shells adhere to it. The animal has a mouth, two ears, and fat on the inside of its mouth up to the outer edge of the shells; the remaining part of its body consists of spongy tissue, made of foam and water'. Ibn abi l-Ḥawāfir continues to explain that at certain times and places, when the waters of the ocean (*ūqiyānūs*) are in strong commotion, shell animals go to the surface to catch spattered drops of water, which, acting like seminal drops (*nutfā*), develop into pearls. When the pearls have coagulated and become firm, the shells sink to the bottom of the sea. All this is reported on the authority of Aristotle. Aristotle mentions nothing of the sort in his zoological works, but the use of the words *astūdūs* and *ūqiyānūs* nevertheless indicate a Greek origin. The information can easily

⁸ Klerk 1993, p. 56.

be traced to the pseudo-Aristotelian *Naʿt al-Ḥayawān* tradition.⁹

The account continues with information from another source, namely about pearl diving.¹⁰ The author describes the ivory clamp that divers put on their noses, the basket they take down, and the jar of oil they carry in order to frighten off dangerous animals. They do so by letting a little bit of oil escape into the water, which floats upwards and scares the animals.

Nature of Ibn abi l-Ḥawāfir's material

The question which I asked earlier was: why are no illustrated manuscripts of Ibn abi l-Ḥawāfir's text known? What made the text less eligible for illustration than Ibn Bakhtīshū's *Manāfiʿ al-ḥayawān*?

There are undoubtedly many factors involved, but here we may only consider whether the contents of the two texts are so basically different that the reason might be sought therein.

The texts have much in common, in the nature as well as the presentation of their material. However, a noteworthy difference between Ibn abi l-Ḥawāfir's work and those belonging to the Ibn Bakhtīshū' / *Naʿt al-ḥayawān* tradition is that the former includes relatively little fantastical material. Animals such as the *shadahwar* and the *rukh*, or the many fantastical birds and sea-creatures found in other texts, are not included, although he has entries on such generally accepted creatures as the *yaḥmūr* (antholops), even describing its useful properties. And appearances may be deceptive: for although he does not devote a separate entry to the halcyon, he includes the story about its nesting on the sea in the entry on the duck (*batṭ*). It should be noted, however, that in the Tunisian manuscript of the pseudo-Aristotelian *Naʿt al-ḥayawān*, to be discussed below, the entry on the halcyon is followed directly by that on the duck, which might indicate that Ibn abi l-Ḥawāfir's text originally had a separate entry on the halcyon.

Furthermore, Ibn abi l-Ḥawāfir bases himself more firmly upon sources than is usual in the Ibn Bakhtīshū' tradition. His approach in general is more scientific, not only because of his references to source material, but also owing to his outlook: he cannot refrain from chiding those people who refuse to admit that ostriches, which lay eggs and have wings and feathers, are birds while on the other hand insisting that the bat does belong to the bird family, despite its being a creature possessing such unbirdlike characteristics as protruding ears and a featherless body, not to mention the fact that it becomes pregnant and gives birth to its young (fols. 132r–v).

Ibn abi l-Ḥawāfir's approach in his entries on animals in some ways resembles that of Marwazī (fl. around 1100 AD), also a medical doctor, and author of another, for the most part unpublished zoological work.¹¹ Three manuscripts of it are known; they also are not illustrated. There is not the slightest indication, however, that Ibn abi l-Ḥawāfir was familiar with Marwazī's work. Marwazī anyway includes a much wider range of fantastical material than Ibn abi l-Ḥawāfir; in his case, it is material originating from the Timotheus of Gaza tradition (Kruk 2001b).

Reception

None of the later sources mentions Ibn abi l-Ḥawāfir by name, but obviously they made ample use of his text. The most striking examples are al-Waṭwāṭ (d. 1218) and Ibn al-Athīr (flourished probably in the first half of the 14th century). The *ṭabāʿi* part of al-Waṭwāṭ's entries on animals in his *Manāḥij* (or *Mabāḥij*) *al-fikar* is largely identical with that of Ibn abi l-Ḥawāfir. He does not include the *manāfiʿ* and *khawāṣṣ*; these he replaces with poetry about the animals in question.

As to Ibn al-Athīr, this otherwise unknown figure, of the same name as the three famous brothers, is the author of the unedited cosmography *Tuhfat al-ʿajāʾib wa-ṭurfat al-gharāʾib*, which is extant in several manuscripts.¹² It was most likely written

⁹ See for instance Ibn Bakhtīshū', *Manāfiʿ al-ḥayawān*, MS Ayasofya A 2916 fol. 66v.

¹⁰ The source in question is not Bīrūnī's *Ḥamāhūr*, which has a somewhat different account of pearl diving.

¹¹ Only the anthropological section was published, see Minorsky 1942; also Iskandar 1981 and Kruk 1999 and 2001b.

¹² Ullmann 1972, pp. 32–33.

after 718 (1318) and before 773 (1372).¹³ He quotes Qazwīnī, al-Waṭwāt and Ibn al-Durayhim, but not Ibn abī al-Ḥawāfir, with whom his zoological material is almost identical. The manuscript I consulted is Berlin, Ahlwardt 6163.

The *Badāʾiʿ al-akwān* may well have been the channel through which a substantial amount of older material was passed onto a later period. It is noteworthy, for instance, that all the quotations from Ibn abī al-Ashʿath's *K. al-ḥayawān* that one encounters in later works can be traced to the *Badāʾiʿ*. Another text for which he may be a major source is ʿAbd al-Laṭīf al-Baghdādī's lost book on animals.

II. TEXTUAL OVERLAP: RELATION OF THE *BADĀʾIʿ AL-AKWĀN* TO OTHER ZOOLOGICAL WORKS

The material presented by Ibn abī al-Ḥawāfir as well as its arrangement in *ṭabāʾiʿ* and *manāfiʿ* places it in a widespread tradition, of which the following representatives will here be taken into closer consideration to gain an idea of the actual overlap between the texts:

- a) Tun: the independent *Naʿt/Nuʿūt al-ḥayawān* text, here represented by MS Tunis, BN 16 385.
- b) Bakht: the Ibn Bakhūshūʿ/*Naʿt al-ḥayawān* tradition; for the manuscripts used, see bibliography.
- c) Jaḥ: not part of the *manāfiʿ* genre proper, but included because of its widespread influence: Jāḥiẓ' *K. al-Ḥayawān*.
- c) Marw: Marwazī's *K. Ṭabāʾiʿ al-ḥayawān*, extant in three manuscripts; quoted here is MS UCLA, Ar. 52.
- d) Qaz: the zoological chapters in encyclopaedical and cosmographical works, here represented by Qazwīnī's *ʿAjāʾib al-makhlūqāt*.
- e) Ḥaw: Ibn abī al-Ḥawāfir, *Badāʾiʿ*, MS Chester Beatty 4352.

We tend to think that such texts all draw upon the same sources, sometimes directly, but more often indirectly, copying each other, and indeed they usu-

ally do. Yet there are many different strands, and correspondences between specific sets of works may be far less numerous than one is inclined to expect. Two examples may serve to demonstrate this, namely the case of the hare and that of the frog.¹⁴ Where I use the word 'exclusively', I mean 'exclusively within this particular set of texts.' I include a translation of just the *ṭabāʾiʿ* part of Ibn abī al-Ḥawāfir's entries, the *manāfiʿ* part being too extensive for the present purpose.

Example I: arnab, the hare (kharkūsh in Marwazī)

Ibn abī al-Ḥawāfir fols. 15a–17a

About the natural characteristics of the hare

The people who speak about the natural characteristics of animals say that the penis of the hare is like that of the fox, half bone and half sinew.

Sometimes the female mounts the male at mating time because of the lust that she feels. She also mates while she is pregnant. She has little milk for her young. They say that she is two months male and two months female. I thought this very farfetched, saying that it was an old wives' tale (Ar. a story, *hikāya*), until, while reading Ibn al-Athīr's book on history called the *Kāmil*, I came upon a story that made me stand wavering between denial and acknowledgement.¹⁵ In his account of the events of the year 623 he says: 'In that year a friend of ours caught a hare. He looked at it and saw that it had testicles, a penis and the vagina of a female. When they cut open its belly, they saw two young¹⁶ in it. If it is as they say, that she is sometimes male and at other times female, this would correspond with that; if not, it would mean that the same thing occurs in hares as in human hermaphrodites which have male as well as female genitals.' To this story he adds something still more curious. He says: 'I was in the Jazīra, and had a neighbour who had a daughter whose name was Ṣafiya. After she had been a girl for fifteen years

¹⁴ My analysis complements Hees 2002, pp. 173–187 (*arnab*) and 199–204 (*daḥḍa*).

¹⁵ MS: *awqafatnī ʿalā l-iʿrāf bayna l-aḥār wa-l-aʿrāf*; I follow Waṭwāt's reading: *awqafatnī ʿalā l-aʿrāf bayna l-inkār wa-l-iʿtirāf*.

¹⁶ MS *ḥarīqayni*, id. Waṭwāt; *ḥarīfayni* Ibn al-Athīr 1853: X, p. 305; **jarwayni*?).

¹³ Ahlwardt 1887–1899, X, p. 457.

she suddenly started to develop the penis of a male and to grow a beard, so that she had a male penis and a female vagina.

The hare sleeps with its eyes open. Sometimes the hunter, coming to catch it, comes right in front of it while it does not notice anything. The cause of this is that its eyelids do not meet each other, so that it keeps its eyes open during sleep as well as waking.

It is said that the hare dies when it sees the sea. That is why it is not found on the coast.

The Bedouins say that the jinn flee from it because of its menstruation. They say that it menstruates like a woman and that it eats meat and such, and that it ruminates and defecates globular dung.

There grows hair inside the corners of its mouth, and also under its feet.

There is no animal with short forepaws that is faster than the hare in running uphill.¹⁷ Its short forepaws make running uphill and climbing easy.

In order to confuse those that come after it, it treads the ground on its *zam'āt*, which are the back-sides of its feet¹⁸ so that its feet do not leave a trace. To a persistent dog and an astute hunter, however, it does not remain hidden, because the hare only does this in the plain where its trace remains fixed. Sometimes it walks in the snow, and then hides its trail by frequently going back and forth, and when it comes to the place where it wants to crouch down it jumps to it.'

Total number of more or less different *ṭabā'ī'* in the texts consulted: ca. 58

| | |
|-----------------------------------|----------------------|
| Number of <i>ṭab.</i> in Tun: 9 | Exclusively Tun: 4 |
| Number of <i>ṭab.</i> in Bakht: 6 | Exclusively Bakht: 1 |
| Number of <i>ṭab.</i> in Jaḥ: 19 | Exclusively Jaḥ: 1 |
| Number of <i>ṭab.</i> in Marw: 30 | Exclusively Marw: 8 |
| Number of <i>ṭab.</i> in Qaz: 7 | Exclusively Qaz: 2 |
| Number of <i>ṭab.</i> in Ḥaw: 17 | Exclusively Ḥaw: 5 |

Ṭabā'ī' in common between:

¹⁷ MS *ḥaḍḍ-an*, cf. Jāḥiẓ 1942–45, VI, p. 375 n. 3: *al-ḥuḍḍ=al-irtijā' fī l-'adw.*

¹⁸ Properly speaking, the *zam'āt* are the hairy tufts at the back of the feet.

Tun-Bakht excl.: 0

Tun-Bakht-Marw excl.: 0

Tun-Marw-Ḥaw excl.: 2

Tun-Bakht-Marw-Ḥaw: 0

Tun-Ḥaw excl.: 1

Bakht-Ḥaw excl.: 1

Jaḥ-Marw-Ḥaw excl.: 6

Jaḥ-Marw-Qaz-Ḥaw excl.: 0

Marw-Ḥaw excl.: 1

Qazw-Ḥaw excl.: 1

Occurring in all: 1

Total number of more or less different *manāfi'/kha-wāṣṣ*: ca. 130

| | |
|---------------------------------------|-----------------------|
| Number of <i>manāfi'</i> in Tun: 11 | Exclusively Tun: 8 |
| Number of <i>manāfi'</i> in Bakht: 45 | Exclusively Bakht: 24 |
| Number of <i>manāfi'</i> in Jaḥ: 1 | Exclusively Jaḥ: 2 |
| Number of <i>manāfi'</i> in Marw: 23 | Exclusively Marw: 9 |
| Number of <i>manāfi'</i> in Qaz: 20 | Exclusively Qaz: 15 |
| Number of <i>manāfi'</i> in Ḥaw: 45 | Exclusively Ḥaw: 21 |

Manāfi' in common between:

Tun-Bakht excl.: 3

Tun-Bakht-Marw excl.: 0

Tun-Bakht-Marw-Ḥaw: 0

Tun-Bakht-Ḥaw excl.: 1

Tun-Ḥaw excl.: 1

Bakht-Ḥaw excl.: 9

Jaḥ-Ḥaw excl.: 0

Marw-Ḥaw excl.: 9

Qazw-Ḥaw excl.: 2

Occurring in all: 0

Example II: ḡafda', the frog

Translation of Ibn abi l-Ḥawāfir fols. 92r–v:

About the natural characteristics of the frog

There are many kinds of frog. There are frogs that come into being through sexual congress and frogs that come into being without sexual congress. Those that come forth from sexual congress lay eggs

in the field and live in the water, while those that come into being without sexual congress are generated spontaneously in stagnant waters with hardly any flow, or they come forth from putrid substances or from copious rain, so that people think that they fall from the clouds, because of the large number of them that is seen on roofs after rain and wind. These frogs do not come forth from males and females, but God creates them in that very moment from the natures of that area.

Frogs do not like to breathe water, but will do so when they are forced to it. They belong to the animals that have no bones.¹⁹

The Bedouins say in their proverbs: ‘firmer than a frog’.

There are frogs that croak and frogs that do not croak; in those that croak, the sound does not come from their mouths, but from thin pieces of skin that are next to their ears. If they want to croak, these pieces open²⁰ (92v) and sound comes out of them. They close up when the cold becomes severe in winter, and do not open again before it becomes warm and the air (MS *al-harr*; **al-jaww*, id. Waṭwāt) becomes temperate again. Then they start to croak.

They are characterized by acuteness of hearing when they stop croaking and are out of the water. The proverb says: ‘More acute of hearing than a horse, an eagle and a frog’.

Frogs are characterized by caution. The proverb says: ‘More cautious than the raven, the sparrow, the magpie and the frog’.

When it wants to croak it puts its lower jaw in the water, and when water comes into its mouth it does not croak.

How elegant is what one of the poets said, when he was chided because he did not speak much:

The frog said words that the wise interpreted,

In my mouth is water, and who can speak with water in his mouth?

When frogs see fire, they are struck with the same perplexity as some other wild animals when they see fire. They look intensely at it and are fascinated by it. For when a frog is croaking and it sees fire, it

becomes silent and keeps staring at it. This is why people take candles to frogs when they croak too much, and this is also why they become silent when they see the light of day.

Total number of more or less different *ṭabāʿi*: ca. 50

| | |
|-----------------------------------|----------------------|
| Number of <i>ṭab.</i> in Tun: 9 | Exclusively Tun: 4 |
| Number of <i>ṭab.</i> in Bakht: 2 | Exclusively Bakht: 1 |
| Number of <i>ṭab.</i> in Jaḥ: 22 | Exclusively Jaḥ: 10 |
| Number of <i>ṭab.</i> in Marw: 19 | Exclusively Marw: 4 |
| Number of <i>ṭab.</i> in Qaz: 9 | Exclusively Qaz: 4 |
| Number of <i>ṭab.</i> in Ḥaw: 17 | Exclusively Ḥaw: 4 |

Ṭabāʿi in common between:

Tun-Bakht excl.: 0

Tun-Bakht-Marw excl.: 0

Tun-Marw-Ḥaw excl.: 1

Tun-Bakht-Marw-Haw: 0

Tun-Ḥaw excl.: 2

Bakht-Ḥaw excl.: 0

Jaḥ-Marw-Ḥaw excl.: 5

Jaḥ-Marw-Qaz-Haw: 2

Marw-Ḥaw excl.: 0

Qazw-Ḥaw excl.: 0

Occurring in all: 0

Total number of more or less different *manāfi*: ca. 80

| | |
|--------------------------------------|-----------------------|
| Number of <i>manāfi</i> in Tun: 11 | Exclusively Tun: 3 |
| Number of <i>manāfi</i> in Bakht: 35 | Exclusively Bakht: 25 |
| Number of <i>manāfi</i> in Jaḥ: 1 | Exclusively Jaḥ: 1 |
| Number of <i>manāfi</i> in Marw: 16 | Exclusively Marw: 6 |
| Number of <i>manāfi</i> in Qaz: 18 | Exclusively Qaz: 15 |
| Number of <i>manāfi</i> in Ḥaw: 22 | Exclusively Ḥaw: |

Manāfi in common between:

Tun-Bakht excl.: 3

Bukh-Tun-Marw excl.: 2

Tun-Bakht-Marw-Ḥaw: 0

¹⁹ Under the *khawāṣṣ*, however, Ibn abi l-Ḥawāfir gives a recipe with frog bones.

²⁰ MS *infataḥat*; id. Waṭwāt 1990, p. 251; possibly *intafakhat*, to swell up?

Tun-Bakht-Haw excl.: 0

Tun-Haw excl.: 0

Bakht-Haw excl.: 2

Jah-Haw: 0

Marw-Haw: 4

Qazw-Haw: 0

Occurring in all: 0

Resulting views

It is clear that as to his *ṭabāʿi*, Ibn abi l-Ḥawāfir is closely related neither to the Ibn Bakhtīshūʿ/*Naʿt* tradition nor to the independent *Naʿt*/*Nuʿūt*, and also not to Qazwīnī. His material stems more from the Jāhīz tradition, just like that of Marwazī, upon whom Ibn abi l-Ḥawāfir is not dependant. As to the *manāfi* and *khawāṣṣ*, he mostly presents an independent choice of material from medical sources. Remarkable in this respect is that there are so few correspondences with the Ibn Bakhtīshūʿ/*Naʿt* tradition. If the Ibn Bakhtīshūʿ part really goes back to the well-known physician, one would expect them to have more medical material in common.

At any event, it turns out that Ibn abi l-Ḥawāfir's choice of material is more interesting than one might expect. Even though his material in itself is only rarely original, his selection of information is often so. Since there are many indications that his *Badāʿi* played a key role in passing on material to later authors, this is not without significance.

III. *NAʿT AL-ḤAYAWĀN*

As we saw above, even a small sample of Ibn abi l-Ḥawāfir's work shows that there are parallels with the Ibn Bakhtīshūʿ/*Naʿt al-ḥayawān* tradition: these are found not only in the sections on the frog and the hare, but also in that on the pearl. This material circulated on a very wide scale, and Ibn abi l-Ḥawāfir could have taken it from any number of sources. We may, however, avail ourselves of these parallels to point out some of the complications of the *Naʿt* tradition which so far have received little attention.

The Ibn Bakhtīshūʿ/*Naʿt* tradition, of which MS London, BL 2784 is considered the oldest representative,²¹ is presented as a compilation of a book on

the medical uses of animals, written by the physician Ibn Bakhtīshūʿ, and a book on animals ascribed to Aristotle, in this context generally referred to as *al-Faylasūf*. The title of this last work is *Naʿt* or *Nuʿūt al-ḥayawān*, and this is supposed to be the book on animals, ascribed to Aristotle, that is frequently referred to in Arabic sources, for instance in Damīrī. This pseudo-Aristotelian zoological tradition has become completely mixed up with the authentic Aristotelian zoological tradition, also widely known in Arabic.²²

The pseudo-Aristotelian *Naʿt*/*Nuʿūt* is supposed to be the one that is meant by occasional references in various texts to 'the old Book on Animals'.²³

No one so far seems to have a clear idea how the *Naʿt* of the combined Ibn Bakhtīshūʿ/*Naʿt* tradition (complicated enough in itself) is related to the *Naʿt*/*Nuʿūt* that exists as a separate text. Two manuscripts of this text are known to exist: one in St Petersburg as well as one in Tunis.²⁴

The St Petersburg *Nuʿūt*, the only one known at the time, was studied by Hans Mayrhofer, who devoted his dissertation to it. This dissertation was handwritten and remained unpublished, apart from a five page excerpt which appeared in 1925.²⁵ The dissertation was still available when L. Kopf consulted it for his translation and study of the zoological chapter of Tawḥīdī's *K. al-Imtāʿ wa-l-muʿānasa*,²⁶ but a recent request to the Munich library yielded the answer that the work could not be traced.

So far I have not had the opportunity to consult the St Petersburg manuscript (Mus. Asiat. 649d) myself, and my own information about this version of the *Naʿt*/*Nuʿūt* is based on the Tunis manuscript.²⁷ On the basis of the published summary of Mayrhofer's dissertation, however, it is easy to see that the two manuscripts on the whole contain the same text.

the Ibn Bakhtīshūʿ tradition see Contadini 1992; also Contadini 1994.

²² Plessner 1968.

²³ Ullmann 1972, p. 16.

²⁴ For the latter, see Sezgin 1970, p. 351; the manuscript is there dated to the 7th/13th century.

²⁵ Mayrhofer 1925.

²⁶ Kopf 1956.

²⁷ Dr. N.P.G. (Peter) Joosse kindly lent me his microfilm of this manuscript, as well as of several other *manāfi* manuscripts.

²¹ For this manuscript and others illustrated ones in

Since so little is known about Mayrhofer's results, I will here briefly sketch his main conclusions as given in the published summary of his dissertation. He informs us that the text contains 120 chapters, and that the beginning is missing. The manuscript starts in the middle of the chapter on the panther, and there the title of the text has been added: *Nu'ūt al-ḥayawān*.

89 chapters, more than two thirds of the book, show literal agreement with the corresponding chapters in the Syriac text edited and translated by K. Ahrens under the title *Das Buch der Naturgegenstände*, usually referred to as BNG. Occasional bits of information about the useful properties of these animals were already included in BNG, but the Arabic text started to include such information on a systematic basis.

Mayrhofer also compared the text with Bar Bahlūl's lexicon, which is known to contain substantial parts from the Syriac BNG, and discusses some interesting cases. He also compared the text of the *Nu'ūt* with Timotheus of Gaza's Greek animal book (5th century CE), of which only a part is still extant; there is ample evidence that this book was widely known in the Syriac and Arabic tradition. Mayrhofer discovered that the information found in the *Nu'ūt* about fourteen animals agreed with that of the text of Timotheus that was known at the time. About a dozen animals mentioned in the *Nu'ūt* remained unidentified, mainly birds, which he supposed to originate from the lost section on birds in Timotheus' book.²⁸

Mayrhofer's guess about the date of composition of the *Nu'ūt* is—somewhat rashly—based on the fact that a) the pseudo-Aristotelian books on trees and stones, the Arabic version of which supposedly dates from the 9th century, are quoted; and b) that Tawḥīdī (ca. 1000), in the zoological chapter of his *K. al-Mu'ānasa*, has literal quotations from the *Nu'ūt*. On this basis, he concludes that the *Nu'ūt* dates at the latest from the 10th century.

The Tunis manuscript,²⁹ which has a title page giving the title *K. fīhi na'ī al-ḥayawān li-Aristātālīs al-ḥakīm yashtamilu 'alā anwā'... (?) wa-abwālihi wa admighatihi*

(?) *min kull dābb* (MS; **dhāt*) *arba' qawā'im wa-mā kāna dhāt al-zulf wa-janāh*, also lacks the beginning of the text, but the missing part is smaller than that of the St Petersburg one. It contains 114 separate entries on animals, and then continues with the description of waters, plants and stones. In the course of these descriptions, another substantial number of animals is dealt with. Particularly in the latter part, Greek names, often unidentifiable, abound.

The descriptions of the animals all start with *qāla al-faylasūf*, followed by 'Know that there is something amazing in the composition (*tarkīb*) of this animal'. In each entry, first the natural characteristics are given, and then follow the *manāfi'*, but *ṭabā'i'* material is also frequently mixed with the *manāfi'*.

It is too early for a full evaluation of the *Nu'ūt*, but it is obvious that the text of the Tunis *Na'ī* is not at all identical to that of the *Na'ī* of the combined Ibn Bakhtīshū'/*Na'ī* tradition.

The list of animals is quite different (see appendix), and the samples of specific entries that I studied, such as the hare and the frog, show many differences. Indeed, the entries on the deer, *ayyil*, show hardly any similarities at all. It is the same with many other entries, and some entries found in the Tunis *Na'ī* do not even occur in the Ibn Bakhtīshū'/*Na'ī*, such as that on the giraffe.³⁰ For a proper insight into the pseudo-Aristotelian zoological tradition, publication of the Tunis/St Petersburg *Nu'ūt al-ḥayawān* is necessary.³¹ Only then will the relationship between these two *Na'ī* traditions become clear.

A second point of interest is the new insight which the Tunis/St Petersburg *Nu'ūt* has to offer about the Eastern tradition of Timotheus of Gaza's animal book. The *Nu'ūt al-ḥayawān*, as Mayrhofer pointed out, seemed to be a key text here. So far, we can at least say one thing, namely that the *Nu'ūt*, at least in the version of the Tunis manuscript, is not the source from which Marwazī, whose *Ṭabā'i' al-ḥayawān* is such an important source for the Eastern branch of the Timotheus transmission,³² obtained his Timotheus

²⁸ Many of these birds belong to the group of birds included in Marwazī's *Ṭabā'i' al-ḥayawān* that I was not able to identify, see Kruk 2001b. At the time I was unaware of the fact that the same cluster is found in the *Na'ī*.

²⁹ Sezgin 1970, III, p. 351.

³⁰ About the giraffe in the Pierpont Morgan *manāfi'* text, see below.

³¹ Dr. N. P. G. (Peter) Joosse, Amsterdam/Leiden, intends to undertake this project in the near future, also taking into account the Syriac tradition.

³² Kruk 2001b.

material: Marwazī's quotations are often far more extensive.

IV GIRAFFE

The case of the giraffe may serve here to illustrate some aspects of what has been said above. It is an animal that has always fascinated the Arabs, and which is often referred to in bestiaries—see, for instance, the long entry in *Damīr*—as well as in other sources.³³ This is not the place to present in full the substantial amount of information on this animal that is available in the sources; I will do so elsewhere. Here, I will just give some facts that are relevant to the present discussion.

To start with Ibn abi l-Ḥawāfir: remarkably, there is no entry on the giraffe in his *Badāʾiʿ*. We can only guess why. Was it because no *manāfiʿ* of this animal were known to him? In any case, al-Waṭwāt and Ibn al-Athīr, who both depended heavily on Ibn abi l-Ḥawāfir for their zoological information, clearly did not find it acceptable to leave out such a striking animal, and sought information elsewhere. Ibn al-Athīr obviously copied Qazwīnī's entry on the giraffe from his *ʿAjāʾib*; as to al-Waṭwāt, he uses other, but also widely known giraffe lore. It may throw some light on the exact relationship between the cosmographies of al-Waṭwāt and Ibn al-Athīr, a relationship which has not yet been fully analyzed.

Then there is the question of the Ibn Bakhṭūshūʿ/*Naʿī* tradition, which also does not include the giraffe. Here, again, one may only guess about the reason: was it possibly the lack of any known *manāfiʿ*? This does not seem very likely.

Only the Persian *Manāfiʿ* manuscript at the Pierpont Morgan library ascribed to Ibn Bakhṭūshūʿ³⁴ has an entry, including a picture, of the giraffe (Fig. 1). We will come back to this entry.

The absence of the giraffe in this tradition is the more remarkable because there is ample indication that the giraffe figured in the pseudo-Aristotelian

zoological tradition: Masʿūdī, in his *Murūj adh-dhahab*, explicitly refers to it: 'Many things are told about the giraffe, and the Master of Logic has mentioned them in his great book about animals and about the uses of their parts and that of other animals' (Masʿūdī 1861–77: III, 5).

Nothing about the giraffe is said in any of the five zoological works of Aristotle, the Master of Logic, so that Masʿūdī most likely refers to a pseudo-Aristotelian source. As it turns out, there is indeed an extensive entry on the giraffe in the Tunis *Naʿī al-ḥayawān*, and it even includes some of its *manāfiʿ*. The question might thus arise whether the Pierpont Morgan giraffe entry goes back to this separate branch of the *Naʿī/Nuʿūt* tradition. This, however, cannot be the case: the Pierpont Morgan entry says only that the young of the giraffe is in the habit of hanging from its mother's womb during pregnancy in order to graze, a story that is also regularly told about the rhinoceros. As to the Tunis *Naʿī*, it says nothing of the sort. Its text runs as follows (fols. 16r–17r; the text is obviously corrupted in many places):

'Description of the giraffe. The Philosopher says that we have to know that in the nature (*khalq*) of this animal there is an amazing miracle. It is composed of two different substances (*jawharatayni*) between the nature of the panther (lacuna?) and his nature is something amazing. They said that close to the south, in the lowest part of the earth, in the summer many beasts of prey and wild animals gather together at watering places in the summer heat, especially when it is very hot and they are very thirsty. Sometimes they mate (MS *yusāfirūna*, **yusāfidūna*) there when they gather at the waters, for these are murky (*ṭarq*). The young of those that succeed in mating with females are animal species of the like of the giraffe and such.

It is in the nature of the giraffe that its body (MS: *jayyid*, **jasad*) is like that of a camel,³⁵ its muzzle like that of the camel (MS *jamal*), its skin like that of the panther and its head like that of the deer (MS *ibil*; **ayyil*), and that it has hooves and ears and horns, and it has a tail like the tail of a gazelle (MS *ṭayr*; **zaby*) and teeth like that of a cow, and that it has long forelegs and short hind legs that are bent backwards (MS *ilā qawāʾimihā*; **ilā warāʾihā*). Its forelegs have

³³ This in contrast to what the *Encyclopaedia of Islam*, art. "Zarāfā", has to say on the subject.

³⁴ Pierpont Morgan Library MS 500. Anna Contadini, who rightly doubted the ascription and connects the text to Shahmardān's *Nuḥḥat-nāma* (Contadini 2004, p. 95), kindly put a copy of the relevant entry, fols. 15v–16r, at my disposal.

³⁵ MS *jamal*; **jāmūs*, buffalo? **dabuʿ*, hyena?

knees, and its hind legs have nothing. The spots on its skin are a clear shining black, and its appearance is to the onlooker very amazing.

It is said that eating giraffe makes the heart strong and increases heat and irascibility (*al-ḥidda*). It has no gall (*marāra*) and it (MS *hyh*; **hiya*) lacks the gallbladder (*marāra*). Its meat is very cold and dry because it is composed of two different natures.'

Apart from what is said on the *manāfi*, there is nothing in this text that is not familiar from other sources. And although many other entries contain material that clearly belongs to the Timotheus of Gaza tradition, this particular entry has nothing to offer in that respect, unlike Marwazī's *Ṭabā'i' al-ḥayawān*. It is just another indication that complicated problems still lie ahead for whoever takes it upon himself to unravel the mysteries of the *Nu'ūt al-ḥayawān*.

APPENDICES

Appendix I

List of sources mentioned in Ibn abi l-Ḥawāfir's *Badā'i' al-akwān* according to Klerk 1993. Not included in the list are most of the refs. to groups in general.

ʿAbd al-Laṭīf al-Baghdādī 17v; 129v
 ʿAbda ibn al-Ṭabīb 116r
 Abu l-ʿAlāʾ al-Maʿarri 97v
 Abu l-Atāhīya 136v
 Abū ʿUbayd al-Bakrī 131v
 Abū ʿUbayd al-Harawī 129r
 Abū al-Ṭayyib al-Kīmīya al-Rāzī 110r
 Abū Ziyād al-Kilābī 114r
 Alexander (of Tralleis, Ullmann 1972: 34) 66v
 ʿAntara 105v
 Aristoteles 10r; 13b; 64r; 71r; 84r; 85v; 95r; 100v; 101v; 106v; 109v; 120v; 123v; 126r; 133v.
 al-Asmaʿī 52v; 87r
 Balīnās 43r
 al-Barmakī, Yahyā 36v
 Būlus 45v; 63r
 Dioscurides 16v; 51r; 51v; 103r; 119v
 Galen 7v; 16v; 24v; 25r; 25r; 43r; 49r; 49r; 49v; 54v; 61v; 62r; 63r; 65v; 68v; 78v; 81v; 93r; 121v
 Hermes 12r; 40r
 Hunayn 125r

Ibn Māsawayh 129v
 Ibn Munqidh, Usāma 26r
 Ibn ʿAws at-Taʾī 50r
 Ibn abi l-Ashʿath 2v; 9v; 83r; 90v; 135v
 Ibn Rāshiq al-Qayrawānī 53v; 30r
 Ibn Harma 130v
 Ibn Qutayba 90r
 Ibn Riḍwān 132r
 Ibn Waḥshīya 26v
 Imraʾ l-Qays 125v
 al-Jāhiz 35v; 36v; 40r; 40v; 42r; 42r; 44v; 53r; 55r; 99v; 101r; 125r; 126r; 129v; 137v.
 al-Kindī 50r
 Kushājīm 90r, 122r
 al-Madāʾinī 26r
 al-Masʿūdī 26r; 105v; 115r, v
 Qurṭub 50v
 al-Rāzī, ibn Zakariya 6r; 14v; 49r; 78v
 al-Thamīmī 19v
 al-Yānus 52v
 Yazīd 114v

Appendix II

List of entries of Ibn abi l-Ḥawāfir's *Badā'i' al-akwān*, MS Chester Beatty 4352.

| | |
|-----|--------------------|
| 2r | <i>Al-insān</i> |
| 10r | <i>Al-asad</i> |
| 14r | <i>Al-ayyūl</i> |
| 15r | <i>Al-arnab</i> |
| 17r | <i>Ibn ʿurs</i> |
| 18v | <i>Al-iwazẓ</i> |
| 20r | <i>Al-afʿā</i> |
| 25r | <i>Al-baqar</i> |
| 29v | <i>Al-baḡhl</i> |
| 31r | <i>Al-baṭṭ</i> |
| 31v | <i>Al-bāz</i> |
| 34r | <i>Al-būm</i> |
| 34v | <i>Al-baʿūdḥ</i> |
| 36r | <i>Al-burghūth</i> |
| 37r | <i>Al-timsāḥ</i> |
| 38r | <i>Al-thaʿlab</i> |
| 40v | <i>Al-jāmūs</i> |

Table (cont.)

| | |
|-----|---------------------------|
| 41v | <i>Al-ǧamal</i> |
| 44v | <i>Al-ǧarād</i> |
| 46v | <i>Al-ǧuʿal</i> |
| 46v | Unreadable (a fish) |
| 47r | <i>Ǧild</i> |
| 47v | <i>Al-ǧundabādastar</i> |
| 50r | <i>Al-ḥimār</i> |
| 52v | <i>Al-ḥimār al-waḥshī</i> |
| 54v | <i>Al-ḥimār al-qabbān</i> |
| 55r | <i>Al-ḥamām</i> |
| 58r | <i>Al-ḥubārā</i> |
| 58v | <i>Al-ḥaǧal</i> |
| 59v | <i>Al-ḥidʿa</i> |
| 60v | <i>Al-ḥirbāʾ</i> |
| 61r | <i>Al-ḥalazūn</i> |
| 63r | <i>Al-khinzīr</i> |
| 64v | <i>Al-khuṭṭāf</i> |
| 66r | <i>Al-khuld</i> |
| 67r | <i>Al-khuṭṭāsh</i> |
| 68v | <i>Al-khuṭṭūsāʾ</i> |
| 69r | <i>Al-dubb</i> |
| 70v | <i>Al-dajǧāj</i> |
| 72r | <i>Al-dīk</i> |
| 74r | <i>Al-durrāj</i> |
| 74v | <i>Al-dalaḥḥīn</i> |
| 75r | <i>Al-dūd</i> |
| 76r | <i>Dūd al-qazz</i> |
| 76v | <i>Al-dhiʿb</i> |
| 79v | <i>Al-dhubāb</i> |
| 80v | <i>Al-dharārīḥ</i> |
| 81r | <i>Al-rakham</i> |
| 82r | <i>Al-zanbūr</i> |
| 82v | <i>Al-zarzūr</i> |
| 83r | <i>Al-samak</i> |
| 85v | <i>Al-saraṭān</i> |
| 87r | <i>Al-shahīn</i> |
| 88r | <i>Shaykh al-baḥr</i> |
| 88v | <i>Al-ṣaqr</i> |

Table (cont.)

| | |
|------|----------------------------|
| 90r | <i>Al-ṣurad</i> |
| 90r | <i>Al-ṣafrāʾūn</i> |
| 90v | <i>Al-ḍabuʿ</i> |
| 92r | <i>Al-ḍafḍaʿ</i> |
| 93v | <i>Al-ḍabb</i> |
| 94v | <i>Al-tāwūs</i> |
| 95v | <i>Al-zibāʾ</i> |
| 96v | <i>Al-ʿuqāb</i> |
| 98v | <i>Al-ʿuṣṣūr</i> |
| 101r | <i>Al-ʿaqrab</i> |
| 102v | <i>Al-ʿankabūt</i> |
| 103v | <i>Al-ʿaqʿaq</i> |
| 104r | <i>Al-ghurāb</i> |
| 105r | <i>Al-fīl</i> |
| 107r | <i>Al-faras</i> |
| 109r | <i>Faras al-baḥr</i> |
| 109v | <i>Al-fahd</i> |
| 111r | <i>Al-fāʾr</i> |
| 113r | <i>Al-qubaj</i> |
| 113v | <i>Al-qatā</i> |
| 114r | <i>Al-qird</i> |
| 115v | <i>Al-qunḥudh</i> |
| 117r | <i>Al-kalb</i> |
| 119v | <i>Al-kalb al-salūqīya</i> |
| 120v | <i>Al-kabsh</i> |
| 121v | <i>Al-karawān</i> |
| 122r | <i>Al-kurkī</i> |
| 123r | <i>Al-karkadann</i> |
| 123v | <i>Al-luʾluʾ</i> |
| 125r | <i>Lisān al-baḥr</i> |
| 125r | <i>Al-maʿz</i> |
| 128r | Unreadable; kind of quail |
| 128r | <i>Al-namīr</i> |
| 129r | <i>Al-nīms</i> |
| 130r | <i>Al-naʿām</i> |
| 132r | <i>Al-nasr</i> |
| 133v | <i>Al-naḥl</i> |
| 135v | <i>Al-naml</i> |

Table (cont.)

| | |
|------|---------------------------------|
| 137r | <i>Al-hudhud</i> |
| 138v | <i>Al-hirr</i> |
| 139v | <i>Al-wa'l</i> |
| 141v | <i>Al-waral</i> |
| 142v | <i>Al-yaḥmūr</i> |
| 143r | <i>Yāmāmat al-baḥr</i> (a fish) |

Appendix III

Provisional list of entries of the Tunisian *Na't al-ḥayawān*. Most entries start with: *na't*... This word has been left out in the list below. The list is presented here with due reservation, as part of ongoing research. The many doubtful readings are provided with question marks.

| | |
|-----|--|
| 2r | <i>al-asad</i> |
| 6r | <i>al-tha'lab</i> |
| 6v | <i>al-qunfudh</i> |
| 8r | <i>al-namir</i> |
| 10r | <i>al-qunfudh al-hindī</i> |
| 10v | <i>al-ḍabu'</i> |
| 12v | <i>al-fāhd</i> |
| 13r | <i>al-kalb</i> |
| 16r | <i>al-zurāfa</i> |
| 17r | <i>al-dhi'b</i> |
| 20r | <i>al-dubb</i> |
| 21v | <i>al-khanāzīr</i> |
| 22v | <i>al-qitāt</i> |
| 23r | <i>al-nims</i> |
| 23v | <i>al-babr</i> |
| 25r | <i>al-dābba allātī tusammā bi-l-gharāyir</i> |
| 25r | <i>dābba tusammā qurquta</i> (= <i>korkotes</i>) |
| 25v | <i>al-dābba allātī tuqālu lahā qātūlīs</i> (= <i>katobleps</i>) |
| 26r | <i>al-dābba allātī tusammā s</i> (MS <i>sh</i>) <i>fīks</i> (= <i>sphinx</i>) |
| 26v | <i>al-wabar</i> |
| 27r | <i>ibn 'irs</i> |
| 27v | <i>al-samandal</i> |
| 28v | <i>al-arnab</i> |

Table (cont.)

| | |
|-----|---|
| 30r | <i>al-faras</i> |
| 32v | <i>al-fīla</i> |
| 36v | <i>al-ḥimār al-ahlī</i> |
| 37v | <i>al-ḥimār al-waḥsh</i> |
| 38v | <i>dābba tusammā al-suryānīya rīmā</i> |
| 39r | <i>al-ayā'il</i> |
| 41v | <i>dābba tushbihu al-ayyil</i> ('Greeks call it <i>zrfjrf</i> ') |
| 42r | <i>faras al-waḥsh</i> |
| 42v | <i>al-ḡibā</i> |
| 43r | <i>al-thawr wa-l-baqar</i> |
| 45r | <i>al-mi'zā</i> |
| 46r | <i>al-ḍa'n</i> |
| 46r | <i>al-shā(t) al-baḥrīya</i> |
| 46v | <i>al-yāmūr</i> |
| 47r | <i>al-jamal</i> |
| 49r | <i>al-wa'l</i> |
| 49v | <i>baqar al-waḥsh</i> |
| 50r | <i>al-jawāmīs</i> |
| 51v | <i>al-'uqāb</i> |
| 53r | <i>al-zummaj</i> |
| 53v | <i>al-buzā(t)</i> |
| 54v | <i>al-yūyū</i> |
| 55r | <i>al-ṣurad</i> |
| 55v | <i>al-dīk</i> |
| 56v | <i>al-tūwūs</i> |
| 58r | <i>al-kurkī</i> |
| 59r | <i>al-tā'ir allādhī (...) bi-l-suryānīya alqawun</i> (= <i>halcyon</i>) |
| 60v | <i>al-baṭṭ</i> |
| 62r | <i>al-nuḥām</i> (<i>flamingo</i>) |
| 62v | Missing |
| 63r | Missing |
| 63v | <i>al-ḥubārā</i> |
| 64r | <i>al-karawān</i> |
| 64v | <i>al-tūṭawī (?)</i> |
| 65r | <i>al-na'laq (?)</i> |
| 65r | <i>al-naḡaḡ/kh/j (?)</i> |
| 66r | <i>al-nasr</i> |

Table (cont.)

| | |
|-----|--|
| 68r | <i>al-rakham</i> |
| 68v | <i>al-ghudhāf</i> |
| 69r | <i>ghurāb al-bayn</i> |
| 69v | <i>al-būm</i> |
| 70v | <i>al-nu‘ām</i> |
| 72r | <i>al-ṭā‘ir allādhī yusammā al-qrlā (fz.lā?)</i> |
| 72r | (about wings) |
| 72v | <i>al-ṭā‘ir (...) b i-l-suryānīya qāqā wa-huwa bi-l-‘arabīya bayḍānī (*al-bayādhī) wa-l-abghath</i> |
| 73r | <i>al-ṭā‘ir allādhī (...) b i-l-yūnānīya fiyyhshn (phoenix)</i> |
| 74r | <i>al-tytyhws (?)</i> |
| 75r | <i>ṭā‘ir yusammā bi-l-yūnānīya frqds</i> |
| 75v | <i>ṭā‘ir yusammā bi-l-yūnānīya afiqūs</i> |
| 76r | <i>farfiyūs (?)</i> |
| 77r | <i>ṭā‘ir (...) b i-l-yūnānīya alwazāwiz wa-ahwazāwīr wa- alqawārīn</i> |
| 77r | <i>ṭā‘ir (...) b i-l-suryānīya farāfsā wa-huwa al-nsm^c (?)</i> |
| 77v | <i>al-hudhud</i> |
| 78r | <i>al-‘udhrūf (?)</i> |
| 78v | <i>al-shaqrāq</i> |
| 79r | <i>al-zrbāb (*ziriyāb)</i> |
| 79v | <i>al-shāhmurj</i> |
| 80r | <i>dajjāja al-ḥabash</i> |
| 80v | <i>al-sha‘āfīn (?) wa-huwa al-yamām</i> |
| 81v | <i>al-‘aṣāfir</i> |
| 82v | <i>al-khaṭāṭif</i> |
| 84r | <i>ṭā‘ir yuqālu lahu al-‘nyra (?)</i> |
| 85r | <i>al-ḥamām</i> |
| 86v | <i>al-ḥrb (?)</i> |
| 87r | <i>al-babaghā</i> |
| 87v | <i>ṭā‘ir (...) b i-l-yūnānīya yāsan? (yābis?) wa-yusammīhi al-‘arab malik al-ḥazīn (ibis)</i> |
| 87v | <i>al-ṭā‘ir allādhī (...) b i-l-suryānīya alhadrūn</i> |
| 88r | <i>al-ṭā‘ir allādhī (...) b i-l-‘ibrānīya ṣafūdḥādī wa-yusammīhi ahl māḍīn bi-l-fārisīya sūtānāt</i> |
| 88v | <i>ṭā‘ir ākhar</i> |
| 88v | <i>ṭā‘ir ākhar</i> |

Table (cont.)

| | |
|------|---|
| 89r | <i>al-khuffāsh wa-yusammā bi-l-‘arabīya waṭwāt</i> |
| 90r | <i>al-‘aq‘aq</i> |
| 90v | <i>al-naḥl</i> |
| 93r | <i>al-zanābīr</i> |
| 94v | <i>al-ḥayyāt</i> |
| 95v | (another entry about snakes) |
| 97r | <i>ḥrs-h yusammā bi-l-suryānīya wa-l-yūnānīya bbbwr (swr.?)</i> |
| 98r | <i>al-af‘ā al-musammā(t) al-karsaqīya</i> |
| 99r | <i>al-‘aqārīb wa-l-harārāt (?)</i> |
| 100r | <i>inqadat nu‘ūt al-‘aqārīb wa-anwā‘ihinna wa-dhakara al-faylasūf ba‘dahunna kull dābba dhāt qarṣ wa-ifsād (here follow, among others, rats and mice)</i> |
| 102r | <i>al-jirdhān allādhī ya‘kuluhu al-‘arab wa-yusammīhi al-dabb</i> |
| 102v | <i>al-jirdhān al-baḥrī huwa al-siqanqūr</i> |
| 104v | <i>al-samm (sic) abraṣ</i> |
| 105r | <i>al-dūda al-hindīya</i> |
| 105v | <i>al-naml</i> |
| 107v | <i>al-khanāfis</i> |
| 109r | <i>al-baqq wa-l-baghūdh</i> |
| 109v | <i>al-barāghūth</i> |
| 110v | <i>al-khuld</i> |
| 112r | <i>al-kāksīya (?)</i> |
| 112v | <i>al-kabaḥ</i> |
| 113r | <i>al-‘itāya</i> |
| 113v | <i>al-kānaj (kalnaj? kabaḥ?)</i> |
| 114v | end of part on animals and their useful and harmful properties; follows a section on the waters |
| 114v | <i>al-buḥūr wa-l-anhār</i> |
| 115v | (about a kind of insects flying above water) |
| 116r | <i>baḥr yusammā baḥr karb</i> |
| 117r | <i>‘uyūn al-nār al-kāmīna</i> |
| 117v | <i>baḥr sūf wa-mā kuwawīna lahu wa-rukkība fīhi</i> |
| 118r | <i>al-anhār al-arba‘a</i> |
| 118v | <i>Ūrjūs</i> |
| 119r | <i>ma na‘ata al-faylasūf fī ḥadd arḍ...</i> |

Table (cont.)

| | |
|------|--|
| 119v | <i>ḥāff (?) al-mā'</i> |
| 121v | <i>samaka yusammā bi-l-yūnānīya sqūrūs</i> |
| 122r | <i>al-dābba allādhī (...) bi-l-yūnānīya fīlā wa-huwa al-laḥm</i> |
| 123r | <i>al-ḥayawān allādhī yusammā bi-l-yūnānīya qālīs</i> |
| 123v | <i>al-naw' allādhī (...) bi-l-yūnānīya wa-l-suryānīya sirānās</i> |
| 124v | <i>naw' dābba min dawābb al-naḥr yusammā qūqīs</i> |
| 125r | <i>al-dābba allāthi yusammā bi-l-yūnānīya qurfirūs wa-huwa al-saraṭān al-baḥrī</i> |
| 126r | <i>al-saraṭān al-kā'in fī al-mā' al-'adhb</i> |
| 126v | <i>al-dābba allāthi tusammā al-zāmūr wa-huwa al-zimār</i> |
| 127v | <i>al-ḥūt allādhī yusammā bi-l-yūnānīya qūlūfūs</i> |
| 128r | <i>al-dābba allādhī tusammā bi-l-yūnānīya akhnāwūs</i> |
| 128v | <i>al-ḥūt allādhī yusammā machines</i> |
| 129r | <i>al-ḥūt allādhī yusammā bi-l-yūnānīya ṭarīqūn</i> |
| 129v | <i>ṭa'ir yusammā al-salwā</i> |
| 130r | <i>ḥūt allādhī yusammā qātūs</i> |
| 131r | <i>al-dābba allādhī (sic) tusammā bi-l-yūnānīya asfs wa-huwa al-dalaḥīn</i> |
| 132r | <i>ṭā'ir allādhī yusammā bi-l-yūnānīya dhāqsūs</i> |
| 132v | <i>al-dābba allādhī yusammā bi-l-yūnānīya akhāṭiyūs</i> |
| 133r | <i>al-lu'ālū'a wa-kawnihi</i> |
| 135r | <i>al-dābba allāthi tusammā al-'alaq</i> |
| 135v | <i>al-dābba allāthi tusammā bi-l-yūnānīya abardiyūn</i> |
| 136v | <i>al-dābba allādhī yusamma bi-l-yūnānīya alkhaymūr</i> |
| 137v | <i>al-ḍaḥādī'</i> |
| 139r | <i>al-lujāh (?)</i> |
| 140r | <i>al-baqar al-ḥabashīya</i> |
| 140v | <i>albbābī (?)</i> |
| 141r | <i>al-dābbā allādhī (...) bi-l-yūnānīya qqrdrūs wa-huwa al-timsāḥ</i> |
| 142r | <i>faras al-baḥr</i> |
| 142v | <i>al-dābba allāthi tusammā rbwāfs</i> |
| 144r | <i>dhikr al-ḥijāra wa-aṣnāfihā</i> |
| 144r | <i>al-ḥajar allādhī yusammā bi-l-maghnaṭīs</i> |
| 144v | <i>ḥijārat al-nār</i> |
| 144v | <i>al-ḥajar allādhī yusammā bi-l-yūnānīya adhāmābīūs</i> |

Table (cont.)

| | |
|------|---|
| 145r | <i>al-ḥajar al-hindī</i> |
| 145v | <i>dhikr al-shajar wa-aṣnāfihī</i> |
| 145v | <i>shajara (...) bi-l-yūnānīya al'raksīs</i> |
| 146r | <i>shajara tusammā bi-l-yūnānīya almūmnūs</i> |
| 146v | <i>nabt yusammā bi-l-yūnānīya fwebhā</i> |
| 146v | <i>nabt yusammā bi-l-yūnānīya dābfien</i> |
| 146v | <i>alāmūrḥ almmā'āwḥ (?)</i> |
| | The next few pages no longer give separate headings, but a jumble of information. |
| 149r | colophon (no date) |

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MAPPING THE MNEMONIC: A LATE THIRTEENTH-CENTURY COPY OF AL-ŞŪFĪ'S *BOOK OF THE CONSTELLATIONS*

Moya Carey

The best-known work of the Iranian astronomer ‘Abd al-Raḥmān b. ‘Umar al-Şūfī (d. 986) is an illustrated treatise on the constellations, entitled *Kūtāb ṣuwar al-kawākib al-thābita* (*The Book of the Constellations*). The treatise was presented in the year 964 CE to the Buyid prince ‘Aḍud al-Dawla (d. 983 CE), in Shiraz. Written in Arabic, it contains a tabled catalogue of over a thousand stars, individual images of forty-eight classical constellations, and a comparative account of the different star-nomenclature used in classical and Arabian astronomy. These three interdependent formats (prose text, tabulated data and labelled images) deliver a web of information about their subject-matter, which gives the student-reader a clear account of the location, magnitude and conventional identities of each single star. The images are single figures, usually line-drawn with the underlying stars painted in a bright colour such as gold or red: this stylistic convention renders the star-group clearly to the eye and to the memory. The essential purpose of al-Şūfī’s illustrations is to aid the astronomy student in committing the entire night sky to memory, by evoking forty-eight mnemonic figures from the starry firmament. A complication for the beginner lies in the inverse relationship between the figures’ appearance in the night sky, and their appearance upon the celestial globe, which was the only current

means of mapping all of the constellations at once.¹ As the model of the celestial sphere was conceived as a thin shell-like surface dotted with stars, a constellation-figure seen from the concave interior of the shell (i.e. looking upwards from Earth) will appear in mirror-image when seen from the convex exterior of that shell, as represented by the surface of the celestial globe.² The unfortunate student must therefore memorise and distinguish both ‘views’, and be as familiar with the celestial globe as with the stars in the sky. Al-Şūfī sought to assist this task by means of a simple innovation, depicting each constellation twice, thus showing both viewpoints together for comparison. The two mirror-image versions are labelled accordingly: ‘the figure as it is seen in the sky’ and ‘as it is seen on the globe’ (Fig. 1).

The reading of al-Şūfī’s images is further complicated by an additional aspect of the treatise: the comparative discussion of star-names used in the Arabian astronomy tradition, which is distinct from

¹ No map depicting all the constellation-figures on paper is known to have survived from the medieval Islamic World, although there are Byzantine examples (Savage-Smith 1992, p. 9).

² Constellation-figures are therefore treated as strictly two-dimensional from the outset.

the classical system. This makes additional demands on the student's power of memory. Across each classical constellation, many of the more prominent stars are labelled with their names from Arabian tradition. This may refer to a star's individual name and identity such as the Shepherd and the Shepherd's Dog, two stars (one large, one small) found in the figure of Cepheus the Ethiopian king (Fig. 1), or to a group identity such as the Horsemen and the Outrider (four stars followed by a smaller single star) in Cygnus the swan. One labelled illustration therefore requires the viewer to 'picture' two sets of images for the same group of stars: one figure is depicted, and the other merely evoked.³ There is a syncretic overlay of two unrelated programmes of imagery, both of which are mnemonic constructs. The basis of this intercultural tally is not whimsical but educational, and depends crucially upon the student's established acquaintance with Arabian constellations. Al-Šūfī's intention was to assist the memorisation process. Being already familiar with the stars by their Arabian identities, the student could therefore rely on such labels as useful pinpoints while getting to know the layout and locations of the classical constellations. The direct juxtaposition of the two systems is presented as a deliberate principle in the final lines of the preface: 'We will now discuss in detail the stars of each constellation, noting their numbers, proper names, and other names according to the astronomers and according to the Arabs, so that [learning about] one system [of nomenclature] may facilitate learning about the other'.⁴

Copies of *Kitāb ṣuwar al-kawākib al-thābita* constitute many of the oldest among extant illustrated manuscripts of the Islamic world, and have much to tell about the production, extent and development of book-illustration from the early eleventh century onwards.⁵ In the majority of extant copies, al-Šūfī's constellation pairs are drawn with great proficiency,

and their utility as star-maps does not eliminate them from consideration in an art-historical context. Indeed, the extent to which the heavily-labelled illustrations engage with the remaining content of the treatise demonstrates that text and image cannot logically be considered separately.

The abundance of illustration per manuscript—a complete copy contains forty-eight pairs of images, of which fourteen are human or semi-human figures, twenty-four animals and ten objects—allows for a generous view of the artist's figural style. The earliest and best known is in the Bodleian Library in Oxford, and is dated 400 (1009–10).⁶ Four further copies of the treatise date from the twelfth century and are attributable to Baghdad, Mardin, and Mosul.⁷ Eight copies are dateable to the thirteenth century. The latest of these, British Library manuscript Or.5323, was produced after the establishment of the Īl-Khānīd dynasty in Iran, and provides an interesting example of the extent to which scientific imagery can reflect contemporary fashion in visual culture.

The British Library houses four manuscripts of al-Šūfī's treatise, of which the earliest—which will be the focus of this paper—is Or.5323.⁸ The codex contains eighty-six folios, and is almost complete. There are fifty illustrated folios, comprising a near-complete cycle of the constellations, missing only Hercules, Virgo, Corona Borealis, Pisces, and the Arabian constellation of the Horse. The codex does not disclose the date, provenance or identity of the copyist, although an additional diagram on the final folio suggests that the book was in the city of

³ In certain enlightening cases, the Arabian constellations emerge from these coy textual references, and are themselves illustrated—overlaid across the classical figure. Most typically, the constellation Andromeda is represented in combination with the Arabian Fish, extending across her body.

⁴ al-Šūfī, p. 43.

⁵ Cf. Carey 2001, Appendix 1 for a provisional catalogue of the extant copies of al-Šūfī's treatise (seventy-one are listed).

⁶ Oxford, Bodleian Library Marsh 144. The copyist and artist have been identified as al-Šūfī's own son Ḥusayn (Wellesz 1959, p. 1). The colophon is signed by al-Ḥusayn b. 'Abd al-Raḥmān b. 'Umar b. Muḥammad (Oxford, Bodleian Library Marsh 144, fol. 213v). The genealogy matches that of the astronomer, but omits the final surname 'al-Šūfī'. The authenticity of the Oxford colophon has been queried (Soudavar 1999, pp. 262–264), although I am not convinced by the arguments offered (Carey 2001, pp. 174–183).

⁷ The Mosul manuscript (Oxford, Bodleian Library Hunt 212, dated 1171 CE) is a rare example of an attested princely commission, being dedicated to a Zangid ruler, Sayf al-Dīn Ghāzī II (r. 1170–80). The dedication is reproduced in Wellesz 1964, fig. 12. Private production of al-Šūfī's treatise is far more common: we learn from several of the early colophons that the manuscript was copied out by a private scholar from an exemplar in a library.

⁸ Cf. Carey 2001.

Qazwīn in 1279–80 CE. It has received rather brief attention from art historians, even though it features many full-page drawings of human figures and animals executed in an intricate linear style typical of thirteenth-century Seljuk art (Figs. 1–4, 6, 8). The style may quickly be connected to the manuscript-paintings of North Jazīra and the overglaze-painted ceramics of Kāshān, produced in the late twelfth and thirteenth centuries. Among the human constellations, the broad countenance termed the Moon-Face, with its minute and regular features, may be recognised (Fig. 3). The fine linear style of the constellation Pegasus finds a stable-mate in a rearing winged horse on a Kāshān ceramic plate (Figs. 4, 5). Although the Seljuk dynasty had since declined, this figural ‘Seljuk style’ was in use throughout the thirteenth century, continuing in the first decades of Mongol power. Before long, the Īl-Khānid presence introduced new motifs and pictorial traditions to Islamic art, but many manuscripts produced under late-thirteenth-century Mongol rule still retain ‘pre-conquest’ painterly conventions, which Schmitz has described as ‘an old and soon to be superseded Seljuq painting style’.⁹

Aside from figural style, the artist also organises some figures in formats which allude to established artistic motifs and conventions of the period. It is a testament to his dexterity that these witty allusions do not interfere with the images’ role as constellation-maps. For example, as the constellations are depicted in pairs (in accordance with al-Šūfī’s innovative double format), in most cases the artist has placed the two versions on the same page-opening, confronting one another directly. This is a deliberate and novel decision: in many other copies of the treatise, the sky and globe versions are depicted on separate page-openings, or on either side of a single folio. By presenting the two versions together, the artist has chosen to exploit the familiarity of mirrored pairs, a resonant topos of Islamic art.

The constellation of Draco consists of a snake-like dragon which coils around the celestial North

Pole. Here in the British Library manuscript (Fig. 6), the artist has laid out al-Šūfī’s pair so as to cite a particular regional motif: the sky- and globe-versions of Draco stand together addorsed, echoing two early-thirteenth-century dragon-shaped brass door-handles from the wooden doors of the Ulu Cami at Cizre (Fig. 7).¹⁰ In both instances, the dragons are depicted with small rounded ears, curled snout, gaping mouth and a characteristic line drawn around the eye. The respective functions of the star-map and door-handle are of course distinct, but the degree of deliberate arrangement on the artist’s part suggests that the visual similarity is intended. This style of door-handle is typical of thirteenth-century south-eastern Anatolia and northern Iraq, and was also reproduced in a 1206 copy of al-Jazarī’s *Book of Ingenious Mechanical Devices* made in Diyarbakir (Amid).¹¹

Certain features of the human constellations demonstrate that the artist has introduced subtle variety into what might be described an essentially static tradition of figural imagery. He exploits minor differences between his confronted pairs to relieve the rigidity of total axial symmetry. The two figures of Perseus are shown with their faces (and also those of their decapitated demons) at slightly different angles, and with their swords crossing in combat (Fig. 2). The globe-version of Cepheus is endowed with a hairier midriff than his sky counterpart (Fig. 1). Their varying facial expressions, one jovial, the other frowning back, also interrupt the potential monotony of repetition. By subtle differentiation, the two versions of the same constellation have come to enact an encounter, exchanging glances or hostilities without distracting from their functional role. This has no operational advantage, but the net effect is to inject the careful symmetrical images with a drop of panache. The convention of juxtaposing these two facial expressions is used in many other constellation-pairs in this manuscript, and is also found elsewhere in Seljuk art, for example between a conversing couple on a 1211–12 CE Kāshān lustre-painted

⁹ Schmitz thus described the style of a contributing painter in the 1297–1300 Marāgha *Kūtāb manāfi’ al-ḥayawān* (New York, Pierpont Morgan Library M.500; Schmitz 1997, p. 13). Simpson also noted the continuity of certain ‘Islamic artistic traditions of the pre-Mongol era’ into the ‘post-conquest period’ (Simpson 1982).

¹⁰ One of the door-handles is in Copenhagen (David Collection 38/1973), and the other (still attached to the Ulu Cami door) in Istanbul, Türk ve İslam Eserleri Müzesi 3749.

¹¹ Istanbul, Topkapı Palace Library Ahmet III 3472, fol. 169r.

bowl.¹² Within crowd-scenes, other painters have inserted the occasional counterpoint to the gracious and typical abundance of broad smiling faces: there is, for example, a frowning figure on the left in the frontispiece throne-scene of the c. 1217–19 CE *Kitāb al-aghānī*,¹³ and another on the upper right attending the courtly gathering depicted in the mid-thirteenth-century *Kitāb al-diryāq* frontispiece.¹⁴ For such witty references to be effective, it follows that the anticipated audience would have recognised these echoes of addorsed dragons and frowning faces from other memorable contexts, and enjoyed their recurrence in the scientific handbook.

A wider survey of constellation iconography has demonstrated that this copy of al-Šūfī's treatise has much in common with a group of three celestial globes, made within the same decade and most likely at the same place: Marāgha in northwest Iran, the first Īl-Khānīd capital.¹⁵ This was the site of an exceptionally important observatory founded in 1259 by Hulāgū (d. 1265), and sponsored by subsequent Īl-Khānīd rulers. The institution was directed by the renowned polymath Našīr al-Dīn al-Ṭūsī (d. 1274), and staffed with an international team of astronomers. It also housed an enormous library.¹⁶ Research at the observatory included the production of a new set of astronomical tables, entitled *Ẓih-i ilkhānī* (1271) in honour of the patron dynasty.¹⁷

The three celestial globes are made of brass, and are clearly engraved with stars, constellation-figures, circles of longitude, latitude and the Ecliptic, and labels noting the names of important stars and constellations. Silver inlay highlights the stars, and in one case also inscribed labels and some mapping-lines. The earliest and largest is dated 674 (1275–76)

and is signed by Muḥammad b. Hilāl al-Munajjim al-Mawṣili.¹⁸ The figures are skilfully engraved with internal detail, as befits an example of al-Mawṣili metalwork. The second globe is dated 684 (1285–6) and is signed by Muḥammad b. Maḥmud al-Ṭabarī.¹⁹ The third has been attributed to c. 1288, and is signed by Muḥammad b. Mu'ayyad al-'Urḍī.²⁰ His identity links him directly to Marāgha: his father Mu'ayyad al-'Urḍī al-Dimashqī was a colleague of Našīr al-Dīn al-Ṭūsī, and constructed many of the instruments at the observatory.

Although the three instruments are not identical, certain instances of shared constellation-iconography corroborate a similar provenance. For example, the constellation Auriga assumes the same crouching pose on all three. This may be connected with Auriga's identity as a groom (rather than the charioteer in classical tradition): there are depictions elsewhere in thirteenth-century Seljuk art of a young stable-hand resting in a crouched position beside a prince's waiting horse, such as the lustre plate famously analysed by Ettinghausen and Guest.²¹ Costume-details recur, such as cross-garters (worn by Auriga and Cepheus), an angular helmet (worn by Sagittarius) and a distinctive conical hat of stepped layers (worn by Serpentarius and Centaurus). The three globes have several stylistic links with the British Library copy of *Kitāb suwar al-kawākib al-thābīta*, particularly the recurrence of a simurgh head motif. Both in the manuscript and on the c. 1288 globe, this is found in the curling wings of Pegasus and on the ship's prow in the constellation Argo Navis. For all four artefacts, the constellation Leo features the fringe of the lion's mane rising in three tufts, and dividing into an ogee over the forehead (Fig. 8). The same full leonine

¹² Tehran, Iran Bastan Museum 8224, reproduced in Fehérvári 1985, p. 143.

¹³ Istanbul, Millet Yazma Eser Kütüphanesi F.E.1566 (volume 17), reproduced in Ettinghausen 1962, p. 65.

¹⁴ Vienna, Nationalbibliothek A.F.10, reproduced in Ettinghausen 1962, p. 91.

¹⁵ Pinder Wilson observed the iconographic similarities between the three globes (Pinder Wilson 1976, pp. 318–319). I conducted a survey of twenty-five celestial globes and copies of al-Šūfī's treatise produced before 1400, and noticed the particular links between this British Library manuscript and the three Marāgha globes (Carey 2001, chapter 3).

¹⁶ Vardjavand 1979 gives a detailed account of the site.

¹⁷ Cf. Sayili 1960, pp. 187–223.

¹⁸ London, British Museum OA 71.3.1, known as the Malcolm Globe, reproduced in Pinder Wilson 1976, figs. 143–158. Diameter: 240 mm.

¹⁹ London, Khalili Collection SCI 21, reproduced in Savage-Smith and Maddison 1997, pp. 212–213. Diameter: 130 mm. I am very grateful to Prof. Michael Rogers and Mr. Tim Stanley for supplying me with further images of this globe.

²⁰ Dresden, Mathematisch-Physikalischer Salon E.II.1, reproduced as lithographs in Drechsler 1873. Diameter: 144 mm. This globe also includes gold inlay. I am very grateful to Dr. Wolfgang Dolz for supplying me with images of this globe. The approximate date is re-calculated in Oestmann 2002.

²¹ Ettinghausen and Guest 1961.

face occurs on Cetus the whale (in the manuscript), Argo Navis (on the 1285–6 globe) and Delphinus the dolphin (on all the globes). The connections suggest a similar regional origin for all four artefacts, of which only one has a certain provenance: the globe produced by the son of al-ʿUrḏī, the instrument-designer at Marāgha.

That the figures in the manuscript and on these instruments might share an iconographical connection is not surprising given the close functional relationship between al-Šūfī's treatise and the celestial globe. Both were important and complementary tools for the astronomer, the globe allowing a simultaneous view of all the constellations, the treatise providing close detail on individual groups and stars. Al-Šūfī's illustrations indicate the positions of underlying stars (using painted circles) at the same time as describing the associated mnemonic figures. Stellar mapping is also prioritised upon illustrated globes, where small circles of metal inlay are circumscribed by an engraved linear constellation-figure. Numerous instances of documentation and historical anecdote further support this relationship: certain globe-inscriptions specifically credit the treatise as the source used for the star-positions, and al-Šūfī's captions specify that images reproduce the constellation 'as it is seen on the globe'.²² The astronomer also wrote knowledgeably about the instrument, and is reported to have constructed a silver globe for his Buyid patron.²³ The two forms of celestial map differ where they manipulate the properties of each medium in order to explicate further: the spherical globe can demonstrate both the entirety and the three-dimensionality of the celestial model with instant clarity, while the paper surface of al-Šūfī's illustrations aptly elucidates the celestial model as a thin plane which can be seen only from one side in reality. Al-Šūfī explains that the connection between the two 'sky- and globe-versions' may be understood

by lifting up the illustrated page to the light. By turning over the page, the same figure may be seen from either angle, demonstrating globe and sky view alternately.²⁴

On its final folio, the British Library manuscript features a small additional diagram, which may be cited as a further link to late thirteenth-century Marāgha (Fig. A).²⁵ It establishes a terminus date of 678 (1279–80), and contains data linked to new research conducted at the observatory. The diagram shows a simple method of deriving the qibla direction, by which the geographical co-ordinates of Mecca are subtracted from the geographical co-ordinates of one's own location. The resulting angle is the direction of prayer.²⁶ In this case, the geographical coordinates are for the city of Qazwīn, given at 85°, 36°. The diagram itself is not highly scientific, but the diagram-maker was applying technical data which had been determined at the Marāgha observatory by 1271. Geographical coordinates were not uniformly agreed, as Kennedy and Kennedy's survey of centuries' worth of gazetteers and zīj-tables has demonstrated. These particular geographical co-ordinates of 85°, 36° for Qazwīn may only be found in one Iranian group of sources, of which the earliest is the aforementioned Naṣīr al-Dīn al-Ṭūsī's *ẓīj-i ilkhānī*, dateable to 1271.²⁷ The diagram was therefore added in 1279–80 by a resident of Qazwīn, to whom the very new Marāgha research had become accessible.²⁸

It has been the aim of this paper to consider the various mnemonic and didactic functions of al-Šūfī's illustrations while also addressing their artistic significance. The drawings remain effective as individual functional star-maps, but the quality of their rendering resists art history's old prejudice against images with diagrammatic utility. The same may be said of the engraved figures on the three celestial globes from Marāgha, which, as we have seen, may share a common provenance with the British Library copy of al-Šūfī's treatise. This manuscript is illustrated in

²² Inscriptions testify that al-Šūfī's star-catalogue was used to calculate the stars' positions on a celestial globe dated 1285–86 (London, Khalili Collection SCI 21, reproduced in Savage-Smith and Maddison 1997, p. 212), and on another dated 1362–63 (Oxford, History of Science Museum 44, 790, reproduced in Mayer 1956, pl. XI).

²³ Ibn al-Qifṭī 1903, p. 440. Aside from *Kitāb ṣuwar al-kawākib al-thābīta*, al-Šūfī composed at least six other treatises, on astronomy, astrology, mathematics and time-keeping.

²⁴ al-Šūfī, p. 46.

²⁵ Reproduced in Carey 2001, pl. 1B.

²⁶ This 'standard approximate method' is associated with al-Battānī (d. 929 CE), and was condemned by later qibla authors for being too inaccurate (King 1999, pp. 337–339).

²⁷ Kennedy and Kennedy 1987, pp. 269–270.

²⁸ Carey 2001, pp. 22–25.

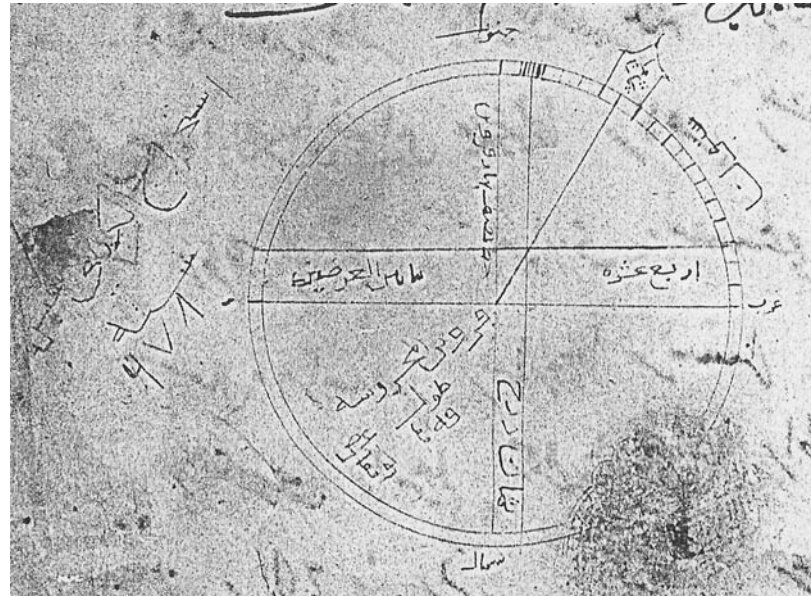


Fig. A. Qibla-diagram. ‘Abd al-Rahmān al-Šūfī, *Kitāb šuʿar al-kawākib al-thābita*, probably Marāgha (Iran), between 1260 and 1280. London, British Library, Or.5323, fol. 86r (folio 210 × 270mm) (Copyright of the British Library).

a fluent linear style which corresponds to other fine examples of Seljuk art, and in some instances, the artist has even manipulated the conventional illustrative format to resonate with particular contemporary motifs, thus playing on the audience’s familiarity with current visual culture. These references have not compromised the didactic worth of al-Šūfī’s classic treatise; rather, they increase the manuscript’s value as a beautiful book to be treasured.

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FROM IRAQ TO FARS: TRACKING CULTURAL TRANSFORMATIONS IN THE 1322 QAZWĪNĪ *‘AḤĀ’IB* MANUSCRIPT

Persis Berlekamp*

This article introduces a long unnoticed but provocative manuscript preserved in the Süleymaniye Library in Istanbul.¹ Dated 722 (1322), it is an illustrated Arabic manuscript of *The Wonders of Creation and the Oddities of Existence* (*‘Aḥā’ib al-makhlūqāt wa-gharā’ib al-mawjūdāt*) by the thirteenth-century judge and *madrasa* professor Zakariyā’ b. Muḥammad al-Qazwīnī.² Currently consisting of 181 folios, and apparently missing only twelve more, this fairly complete manuscript has 462 illustrations in the style that was characteristic of the southern Iranian region of Fars while it was administered for the Mongol Ilkhanids by their Inju vassals (1325–1353).³ The manuscript is provocative not only because of its somewhat early date, but more importantly because it makes clear that the arts of manuscript illustration in the regions of Iraq and Fars were much

more closely connected than has previously been understood. These points in turn raise important questions about the audiences of books illustrated in the style we call ‘Inju’ in particular, and about the social geography of the arts of the book in Iran and Iraq in this period in general. The manuscript therefore suggests new paths along which to track the profound cultural transformations that occurred in the Islamic east in the century following the Mongol conquest of Baghdad in 1258.

The established scholarly narrative of how the Mongol conquest impacted the overall history of Islamic manuscript painting is based on a comparison of the manuscripts that were central to the cultural life of pre-conquest Abbasid Baghdad with those later made for the courts of the Mongol Ilkhanid conquerors at Tabriz. Before the conquest, this narrative goes, most illustrated manuscripts were written in Arabic, concerned with the study of nature, and read by an intellectual rather than a political elite. The paintings in these manuscripts tend to be illustrations of specific species or objects mentioned in the text. After the conquest, this narrative continues, there emerged a new interest in illustrated manuscripts written in Persian, consisting of histories and epics, read by the political elite of the Mongol court. Along with a shift towards narrative texts comes a shift towards

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¹ Yeni Cami 813. Berlekamp 2003, Chapter 3 and Appendix B.

² Hees 2002, pp. 19–90; Berlekamp 2006.

³ Bosworth 1996, p. 266.

narrative images. The impact of the conquest on illustrated manuscripts is therefore characterized by a set of associations between language, subject matter, audience, and image type. The significance of this within the broader history of Islamic manuscript painting is conveniently indicated by the fact that the Mongol conquest is the chronological moment that marks the division between two complementary classics of the field: Richard Ettinghausen's *Arab Painting*, which trails off after the conquest of Baghdad, and Basil Gray's *Persian Painting*, which starts with painting under the Mongols in Iran.⁴

While the standard of post-Mongol illustrated manuscript production in this narrative has been defined with reference to manuscripts attributed to Tabriz, it is well established that there were also important centers of illustrated manuscript production in Iraq and in the southern Iranian region of Fars.⁵ In both of these areas, illustrated manuscripts were produced that were quite distinct from those produced in Ilkhanid Tabriz, and in both cases, this may be explained by the fact that though both regions were officially part of the Ilkhanid realm, the Ilkhanids never established a court in either. Instead, Iraq was officially an Ilkhanid province, and therefore had its own local administration, while Fars was indirectly administered for the Ilkhanids by the family which came to be known as the Inju.

Despite these parallels, scholars have approached Iraq and Fars quite differently when it comes to positioning them within the broader history of the Mongol conquest's impact on manuscript production. Iraq, on the one hand, has been considered as a center of transition. Among the manuscripts produced there, scholars have found examples that bridge the polarities of pre-conquest Arabic scholarly scientific manuscripts and post-conquest Persian courtly epics and histories.⁶ Fars, on the other hand, has been seen as an interesting tangent from the main history of Islamic manuscript painting. The illustrated manuscripts produced there have not been understood as connected to either the pre-Mongol traditions of Arab painting, or to the later traditions of Persian painting as it developed after the collapse of the

Ilkhanids. In a departure from some early and rather speculative attempts to link them to Sassanian wall-painting,⁷ more recent scholarship has shown that in fact the manuscripts of Inju Fars do reveal significant influence from Ilkhanid Tabriz;⁸ this positions them as a tangent to Tabriz within the broader history of Islamic manuscript painting. The best known Inju manuscripts are Persian epics—*Shāhnāmas*—one of which was made for the vizier Qawām al-Dawla wa-'l-Dīn Ḥasan.⁹ Since the language, subject matter, and the little that is known about the audience of the Inju *Shāhnāmas* fit the expected constellation for post-conquest manuscripts, the question of how these books might relate to pre-conquest Arabic manuscripts on nature that were read by a non-court audience has not even been raised. The illustrated manuscripts of Inju Fars have therefore so far remained peripheral to the discussion of the broader transformations associated with the conquest.¹⁰

The 1322 Inju Arabic Qazwīnī *ʿAjāʾib* manuscript, however, brings Inju painting directly into the question of how the Mongol conquest's impact on Islamic manuscript painting played out. In the pages that follow, I will attempt to establish the manuscript's Inju provenance, trace the chain of transmission leading up to its production, and consider the implications of the 1322 date documented in the colophon. Attention to these known points about the manuscript's production leads to three conclusions. First: that Inju painting should be considered with reference not only to Ilkhanid painting, but also to the traditions of Arabic-language illustrated manuscript production that flourished in Iraq. Second: that the connections between manuscript production in Ilkhanid Iraq and Inju Fars hint strongly that the original readers of the 1322 manuscript may not have been members of the Inju court, but may have belonged to the scholarly bureaucrat class. And third: that the 1322 manuscript bridges the visual, linguistic, intellectual, and social polarities according to which we define the shift from pre- to post-conquest arts of the book. In so doing it offers a view of that shift as it progressed in Fars,

⁴ Ettinghausen 1962; Gray 1961.

⁵ For an overview of artistic production in these regions, see Carboni 2002.

⁶ Simpson 1982.

⁷ Adamova and Giuzal'ian 1985.

⁸ Sims 2006; Wright 2006.

⁹ Stchoukine 1936; Simpson 2000.

¹⁰ The connections between manuscript illumination in Fars and elsewhere are better established. See, Wright 1997; Wright 2006; Carboni 2002.

and repositions this region as a center of transition alongside Iraq.

The reasons for assigning the manuscript to Inju Fars bear stating from the outset. This is particularly necessary as most known manuscripts of Inju provenance are in Persian, whereas this manuscript is in Arabic. The colophon gives no place of production, but documents that it was completed in 722 (1322) by the scribe Muḥammad b. Maṣūd b. Muḥammad b. Maḥmūd al-Hamadānī (Fig. 1). Despite damage to the paper on which it is written, the full reading of the scribe's name can be confirmed, because he was also responsible for a 1329 manuscript of Qazwīnī's other text, *The Monuments of the Lands* (*Āthār al-bilād*), now in the British Library.¹¹ Elaine Wright has attributed the London manuscript to Inju Fars on the basis of its illumination.¹² The fact that the same scribe worked on both manuscripts offers a strong initial indication that the 1322 book is also likely Inju.

The style of the paintings confirms an Inju provenance. The frontispiece, though it suffers from over-painting, clearly follows the known typology of other Inju frontispieces (Fig. 2).¹³ Further, many of the illustrations in the 1322 Inju Qazwīnī have the opaque backgrounds associated with Inju painting. As these opaque backgrounds are characteristic but not *exclusively* characteristic of Inju painting in this period, it is worth mentioning that several of the 1322 Süleymaniye Qazwīnī paintings share the detail of stalk- or grass-like vegetation that is also found in other known Inju manuscripts such as the 1330–31 *Shāhnāma* (Figs. 1, 3, and A). Most strikingly, the 'anqā bird in the 1322 Süleymaniye Qazwīnī resembles the illustrations of the *simurgh* found in other Inju manuscripts (Figs. 4 and B). Since both the 'anqā and the *simurgh* could reputedly carry humans in flight, it was widely imagined that they looked alike. As Marie Lukens Swietochowski and Stefano Carboni have noted, the Inju did not share the vision of the *simurgh* that dominates throughout the history of Persian painting. The dominant image of the *simurgh* is an elegant elongated bird deriving from the Chinese phoenix, of *fēng huang*, and appears in

Persian painting as early as 1300. But apparently, the Inju envisioned both the 'anqā and the *simurgh* as birds with bulky compact body types, like enormous multi-colored owls.¹⁴

The manuscript contains no dedication, and although two of the inscriptions on the flyleaf do identify specific owners, these appear to be later inscriptions that do not pertain to its early history.¹⁵ Yet, the chain of transmission of text and images leading up to the production of this manuscript is unusually clear. This is helpful because the production of manuscripts, in a manner that is easily forgotten in our own age of digitally formatted printed books, requires direct human contact to arrange for extended access to physical models. Careful consideration of the chain of transmission that led up to the production of the 1322 Qazwīnī manuscript therefore offers some important hints concerning its original social milieu.

This chain of transmission starts with the only remaining dated manuscript that was produced in the author's lifetime.¹⁶ That manuscript, now in Munich, was completed in Wasit in 1280. The significance of this fact has been obscured by the long-accepted reconstruction of Qazwīnī's biography presented in the *Encyclopedia of Islam*, which suggests that he had left Wasit and his post as *qāḍī* when the Mongols defeated the Abbasids in 1258.¹⁷ However, in an extensive recent study based largely on scattered references in *The Monuments of the Lands* and partly on other sources such as the *Chronicles* (*al-Ḥawāḍith al-jāmi'a*), thought to be by Ibn al-Fuwatī, Syrinx von Hees shows that in fact Qazwīnī was still in Wasit in 1280. Further, in that year, he was still the *qāḍī* there, and was also a professor at Wasit's Shāfi'ī Sharābī Madrasa. The 1280 manuscript, von Hees argues, was most likely Qazwīnī's own teaching copy.¹⁸ While in reaching this conclusion she may have placed undue emphasis on the fact that he is referred to

¹¹ British Library Or. 3623, fol. 173r.

¹² Wright 1997, p. 12; Wright 2006, Figs. 34–40.

¹³ Simpson 2006.

¹⁴ Swietochowski and Carboni 1994, p. 82.

¹⁵ See the catalogue at the end of this article.

¹⁶ Another manuscript, possibly Mamluk, may have been produced in his lifetime but it is undated. Carboni and Contadini 1990.

¹⁷ *EI2*, s.v. "al-Qazwīnī, Zakārīya b. Muḥammad b. Maḥmūd Abū Yahya."

¹⁸ Hees, pp. 19–90.



Fig. A. Raksh slays the lion. Firdausī, *Shāhnāma*. Shiraz, 731 (1330–31). Istanbul, Topkapı Palace Museum Library, H. 1479, fol. 30v (Courtesy of the Topkapı Palace Museum).



Fig. B. Sām sees Zāl with the Simurgh. Firdausi, *Shāhnāma*. Shiraz, 742 (1341). Dispersed. LNS 36 MS, The al-Sabah Collection, Dar al-Athar al-Islamiyyah, Kuwait National Museum. Recto (Courtesy of the Dar al-Athar al-Islamiyyah).

therein as *mawlānā* (teacher),¹⁹ other evidence also points to the same conclusion. Most importantly, his name and title appear in an illuminated rosette on the first folio: precisely the place where the names of patrons, dedicatees, and other first owners tend to be written when they are written at all. On folio 1a, against a background of spiraling palm leaves, we read: ‘Zakariyā’ b. Muḥammad b. Maḥmūd al-Qazwīnī al-Kamūnī, the *qāḍī* of Wasit of Iraq.’²⁰

The social context of the 1280 Wasit manuscript can therefore be described with a fair degree of accuracy. It was read and seen not by the political elite of any court, but rather by Qazwīnī and his students. Qazwīnī himself, as *qāḍī* and *madrassa* professor, was a member of an intellectual elite, institutionally tied to the religious and educational bureaucracy of Wasit. Though its heyday in the Umayyad period had long passed, Wasit remained in this period a city of considerable importance. Dwarfed in historical memory by comparison to Baghdad, its economy was in fact comparable to that of Shiraz in this period,²¹ and it still regularly attracted traveling scholars from all over the Islamic world.²² Given that he was not only a professor but also the *qāḍī* of Wasit, Qazwīnī was one of the more prominent intellectuals in the city, and it is reasonable to assume that traveling scholars from other cities would have sought him out.

Among the people who saw Qazwīnī’s 1280 Wasit manuscript were evidently the producers of an Arabic fragment of Qazwīnī’s *‘Ajā’ib al-Makhlūqāt* now in Gotha. The provenance of this fragment has previously been somewhat unclear, but as Carboni has noted, its text block must have been produced with the 1280 Munich manuscript as its model, because despite radical differences in the styles of the images in the two manuscripts, the layout of image spaces within the text is the same.²³

The 1322 manuscript clarifies the provenance of the Gotha fragment, since the two manuscripts share several sets of closely related images (Figs. 5 and 6).

Karin Rührdanz attributed the Gotha fragment to Inju Shiraz in the 1340’s. Although Stefano Carboni subsequently commented that he felt it had probably been made closer to Wasit, and earlier, than Rührdanz had suggested, her attribution was followed in a catalogue of Gotha’s Oriental manuscripts.²⁴ The 1322 manuscript suggests that Rührdanz was right about the place while Carboni was right about the date.

To summarize the relationship between the three, the layout of the Gotha fragment follows that of the 1280 Wasit manuscript; and though the layout in the 1322 manuscript differs from both, several of its images are so closely related to the corresponding images in the Gotha fragment as to invite direct comparison. Therefore, the 1280 Wasit manuscript served as a model for the producers of the Gotha fragment, and the Gotha fragment in turn served as a model for the producers of the 1322 manuscript. The fact that the Gotha fragment is necessarily the second manuscript in this chain of transmission because of its layout establishes that it was produced earlier than the 1322 manuscript. Though no previously known illustrated Inju manuscript bears a date earlier than 1330, it is known that illuminated volumes were being produced in Inju Fars as early as 1308.²⁵

Before 1322, the degree to which we might meaningfully refer to the Inju household as a “court” is dubious. Their Ilkhanid overlords had sent them to administer the estates (*injū*) of Fars in 1303, but it was only in the mid-1320’s that they started to effectively establish the local power that would allow them to operate as a court with de facto independence in the 1330’s and 1340’s.²⁶ The typical pattern in this period was that the households whose political roles were established after the conquest worked directly with local religious bureaucracies that had been in place prior to the conquest. Particularly in the early period of their assignment to administer estates in Fars, when the Inju’s political position was relatively weak, the local religious bureaucracy must have

¹⁹ References to Qazwīnī as ‘*mawlānā*’ also appear in manuscripts of his text that were produced centuries after his death.

²⁰ On this manuscript see Hees, pp. 91–350; Berlekamp 2003, pp. 39–88; Carboni 1992, pp. 542–564; Bothmer 1971.

²¹ Petrushevsky 1968.

²² Berlekamp 2003, pp. 77–78.

²³ Carboni 1992, 411.

²⁴ Rührdanz 1973; Carboni 1992, p. 411; Nebes 1997.

²⁵ Wright, p. 12, n. 5. The attribution of the 1307–8 London *Kalīla wa-Dimna* to Shiraz does strike me as a plausible hypothesis. Yet, its significant stylistic differences from the recognized corpus of Inju illustrated manuscripts exclude it from the general category of Inju painting as we now understand it. Waley and Titley 1975.

²⁶ *EI2* sv., ‘Indju.’

played a critical administrative role. The Inju could not have effectively administered the Ilkhans' estates there without working with the local bureaucracy, and would have cultivated allies and recruited associates from this class. This class would have been the Fars equivalent of the one to which Qazwini belonged in Iraq.

One can therefore easily imagine a number of plausible scenarios that would have resulted in the production of the Gotha fragment a generation after the production of the Munich manuscript. The principle actors in all these scenarios would be members of the scholar/bureaucrat class in Iraq; members of the scholar/bureaucrat class of Fars, and members of the Inju household who depended on the latter. Scholars from either region were quite likely to visit the other in pursuit of knowledge, studying the books available there, and bringing their own books with them. It is easy to envision that a scholar from either Fars or Iraq studied the 1280 manuscript with one of Qazwini's protégés in the decades after the author's death, and then brought a copy of the text to Fars, which was subsequently illustrated there. If its first owner was indeed a member of the scholar/bureaucrat class, the manuscript might or might not subsequently have passed to the ownership of an associate of the Inju household, which relied heavily on that class at the time. Given that the Inju household was not firmly established as a *de facto* independent court at the time, its own position was not significantly removed from that of the local scholar/bureaucrat class anyway, so the distinction is of limited consequence. The point is that it makes more sense to think of the original readers of the Gotha fragment in terms of their connection to a scholarly/bureaucrat class than to think of them exclusively in terms of a presumed connection to the Inju family.

As indicated earlier, the Gotha fragment was clearly a model for the Süleymaniye manuscript. A comparison of the two manuscripts in the portions where both are still extant is instructive. It reveals that there are several sets of comparable images whose compositions are so similar as to invite direct comparison, but that these stand out from the majority of illustrations, which generally differ significantly between the two manuscripts. This follows the pattern that Ada Adamova noted among fifteenth and

recently also fourteenth century manuscripts.²⁷ She has brilliantly shown that the repetition of compositions can be seen as a painterly parallel to repetition in poetry. Here, however, I explore another implication of the compositional repetitions in the two Inju Qazwīnī cosmographies.

For each pair of directly comparable images found in the two Inju Arabic manuscripts of Qazwīnī's cosmography, there is a noticeable difference in quality, and in each case, the composition in the Gotha manuscript is slightly better. In the Gotha fragment, for example, the composition of the horses is cleverly contained within an implied double loop like a sideways figure eight that keeps drawing the eye back into the composition (Figure 7). The same cannot be said of the corresponding Süleymaniye example (Figure 8). In other such directly comparable pairs, the Gotha image is executed with more detail or with more expensive pigments. Codicological features also demonstrate that the 1322 manuscript is a less deluxe variation of the Gotha fragment. Of the two, the 1322 manuscript was produced with greater economy, not only of artistic effort, but also of paper. Whereas the Gotha folios are currently 28.9 × 20.7 centimeters with twenty-seven lines of text each, the Süleymaniye folios are only 26.4 × 17.6 centimeters with thirty-one lines of text. Given that the Gotha folios have been trimmed, the original difference between the two would have been even more dramatic.

One might initially conjecture that the difference in quality between the two manuscripts could be explained by different economic circumstances in Inju Fars at the times when they were produced. But if this were the case, we would expect the later manuscript, the 1322 Süleymaniye manuscript, to be the more deluxe version; from the late 1310's to the mid-1320's, we know that the local economy and the political position of the Inju household improved dramatically. However, it is in fact the earlier manuscript that is the more luxurious of the two. Another explanation for the difference is required.

A more plausible explanation in this case is that differences in the quality of the two manuscripts express fine distinctions in the social status of their readers. Leaving aside the compositions that are dramatically different in each manuscript, pairs of compositions

²⁷ Adamova 1992 and 2004.

apparently designed to invite comparison between manuscripts imply readers in social relationships that would allow them to engage in such comparisons: readers operating in the same social circles and having access to each others' manuscripts. Yet if the original audience of the 1322 manuscript held a rank higher than or equal to that of the original audience of the earlier manuscript now at Gotha, it would hardly have accepted an obviously worse manuscript as suitable. This is particularly the case given that the economic and political circumstances that would enable access to better workmanship and materials in Fars were improving at the time.²⁸ The original audience of the 1322 manuscript, then, would have belonged to the same broad social class of scholars and bureaucrats as that of the Gotha fragment, but of a slightly lower status within that class.

The two Inju Arabic Qazwīnī cosmographies, both produced before the Inju household was fully established as a court, support Elaine Wright's recent argument that royal patronage of Inju manuscripts emerged only around 1340. Traditionally, illustrated Inju manuscripts have been associated with the Inju court because one of them, the 1341 *Shāhnāma* has a documented reader: the vizier Qawām al-Dawla wa-'l-Dīn Ḥasan.²⁹ He was not a prince, but the highest ranking administrator of the Inju court in its most powerful period.

The chain of transmission leading up to the production of the 1322 manuscript, the social relationships implied by the hierarchical qualities of the two Inju Qazwīnī cosmographies, and the subsequent history of Inju manuscript painting define the parameters of the social circles within which the original readers of the 1322 manuscript operated. They

operated between what have emerged with historical hindsight as two worlds with very different intellectual and artistic lives, dominated by different kinds of texts that were associated with different traditions of manuscript illustration. Both these worlds found resonance in Qazwīnī's text, and both are reflected in the illustrations of the 1322 manuscript.

At one extreme, as signaled by the 1280 Wasit manuscript, was the intellectual world of the local religious bureaucracies, a class established prior to the Mongol conquest which continued to play an important role in its wake. At the other, as signaled by the Inju *Shāhnāmas*, was the political world of the Turko-Mongol courts which wielded power in the early fourteenth century, such as the Ilkhanids and, from the mid-1320's, the Inju.

The Wasit manuscript itself constitutes important evidence as to what types of texts the intellectuals of the local religious bureaucracies read. Evidently, their intellectual interests were not restricted to the study of Islamic jurisprudence, which was at the heart of the curriculum in medieval Islamic *madrasas*. As Qazwīnī's Wasit manuscript demonstrates, some of the very figures who taught in the madrasas and served as judges also took an interest in the study of nature.

The study of nature was posed in a specifically Islamic manner through a cosmographic model that had spread among intellectuals through the teachings of Ibn Sīnā. According to this model, widely referred to in the secondary scholarship as Islamic Neoplatonism,³⁰ there was no contradiction between creation as presented in the Qur'ān, on the one hand, and the idea of pre-Islamic philosophers that nature had emanated from a single source, on the other. The single source mentioned by the pre-Islamic philosophers was equated with God in the Islamic interpretation; thus it is that Qazwīnī refers to God as *al-mufīd* (the source of the emanation) in his preface.³¹ Through Ibn Sīnā's influence, it

²⁸ A similar relationship of clear qualitative hierarchy discernable through directly comparable sets of images pertains to three of the Inju *Shāhnāmas*: the dispersed 1341 *Shāhnāma* (Simpson 2000); a manuscript now at the Topkapı Museum Library dated 1330 (Topkapı Saray Museum, H. 1479, 1330. Çağman and Tanındı 1979, cat. no. 14); and another now in St. Petersburg dated 1333 (St. Petersburg, National Library of Russia, Dorn 329, 1333. Adamova and Giuzal'ian 1985). The 1330 manuscript is the most deluxe, the 1333 manuscript is the least deluxe, and the 1341 manuscript falls somewhere in the middle. However, it is difficult to say whether the qualitative ranking of the *Shāhnāmas* implies a hierarchy of readers similar to that of the Qazwīnī cosmographies.

²⁹ Wright 2006; Simpson 2000; Stchoukine 1936.

³⁰ As Dimitri Gutas has kindly brought to my attention, the term 'Neoplatonism' is problematic here, because authors such as Ibn Sina focused largely on texts that they believed to have been authored by Aristotle. However, no alternative term so clearly places the Islamic intellectual tradition under discussion into the broader context of medieval thought to which it belongs by signaling that it parallels the Neoplatonic tradition in Europe.

³¹ Munich, BSB, cod. arab. 464, fol. 1v.

came to be widely believed that all of creation had emanated from God, and further that the different classifications of creation had emanated in a specific order. Those created things that were nearest to God had emanated first, and those that were furthest had emanated last.³² The order of emanation was therefore correlated with a hierarchy of creation. This is the broad cultural background that explains why, in Qazwīnī's cosmography as in other medieval Islamic studies of nature, the created wonders of the heavenly realm precede the created wonders of the earthly realm, and the mixed breeds that transgress the classifications of creation appear last.

Closely associated with Arabic texts on the study of nature was a tradition of manuscript illustration in which individual created things were most often depicted in isolation against a plain ground. The images in the Wasit manuscript generally conform to this type, even when they experiment with new stylistic possibilities for depicting such subjects as animals in motion (Fig. C). Each specific species appears in isolation, as was characteristic of the depictions of plants in thirteenth-century Dioscorides manuscripts, for example. In the 1322 manuscript, the images in the chapters on trees and plants also follow this compositional type (Fig. 7). The compositions of individual species against a plain ground indicate a clear awareness of the text's position within a broader corpus of Arabic texts concerned with the study of nature, even as the shading of the bark of the tree trunks in the same images indicates an interest in experimenting with new stylistic possibilities being pursued at that time in Tabriz.

The paintings in the rest of the 1322 manuscript also give visual emphasis to the cosmographic frame of the text, but in a new way. The painted backgrounds of the illustrations emphasize the order of creation established in the textual frame. The wondrous created things in the heavens appear against a deep blue background, suggesting the night sky (Fig. 8). The section on the earth that follows begins with a discussion of the seas, the islands, and their inhabitants, and here the prevailing background suddenly shifts to a pattern of blue waves (Fig. 9). However,

when the painter depicts the created wonders of the land in subsequent chapters, he prefers backgrounds of red, orange, and ochre, ground colours widely associated with Inju painting (Figs. 1, 3, and 6). It thus becomes obvious that in this manuscript, red, orange, and ochre are literally used as 'earth tones.'³³ The painter only breaks the pattern of using blue waves backgrounds in the seas section if he is depicting a created wonder on the dry land of an island, such as a tree on the island of Wāqwāq (Fig. 10), or a narrative which takes place partly over land. The image that accompanies the entry for the Persian Sea is an example of the latter. In this painting, which illustrates the well-known story in which a hapless traveler stranded on an island in the Persian sea is brought safely to mainland by the giant Rukh bird (Fig. 11), the red background emphasizes the importance of dry land in the tale.

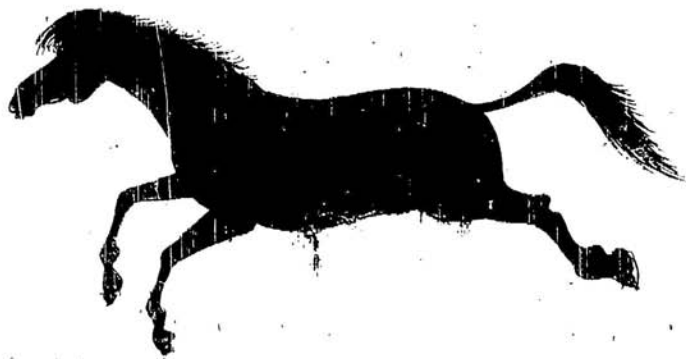
Even though the local language of Fars was Persian, the Arabic language of the 1322 manuscript demonstrates that its original audience was comfortable in an Arabophone intellectual arena, as we would expect from the religious scholar-bureaucrat class. While the hierarchical organization of Qazwīnī's cosmography made it accessible to the religious scholar-bureaucrats by and for whom it was first written, it also had narrative elements that later made it appealing at the Turko-Mongol courts. In subsequent generations, the translation of Qazwīnī's cosmography into Persian helped to make it accessible to audiences at the Turko-Mongol courts.

The illustrations of the 1322 manuscript suggest that even as its readers appreciated the text from the perspective of a linguistically Arabic intellectual discourse concerned with the study of nature, they were simultaneously reading the text from another perspective, one that was becoming increasingly prevalent at the linguistically Persian courts. Whereas the use of colored backgrounds to emphasize the importance of the order of creation within the text indicates that the 1322 manuscript belonged to an

³² For a general account of the understanding of the emanation of creation as popularized by Ibn Sīna, see 1970, pp. 21–27.

³³ Interestingly, most of the scenes with red, orange, and ochre backgrounds in the Inju *Shāhnāmas* do actually take place on dry land, so the use of those particular colours in the later history of Inju painting may have been a legacy of the early Inju Qazwīnī cosmography manuscripts and the background colours that their painters used to emphasize the classification of creation.

متقاصد ليقوم له مقام الجناح للطائر والاقوام للدواب فقال تعالى والخيول والغال الحمر ليركبوها
 وزينة ولما كان الفرس من حيث امر الجمار خلقت اذنه اصغر وذنبه اطول لان الفرس يكسبه لصناده
 دور ما يركب الجمار وكذلك خلق ذنبه اطول لان اجناس الفرس يلدغ الحوام فوق اجناس الجمار فاجاب
 الى ذنبه طوله الطافات ولما كان المطلوب من الدواب السير صرقت العناية الى تصديق حوافرها ليتمكن
 المشي الكثير عليها وليكون لها دافعاً للدور فان كل حيوان له جافر لاقر له لان المادة لا تنبى بها جميعاً
 والحيوان الذي له قرن لا جافر له بل له طلق لان المادة صرقت بعضها الى القرن وبعضها الى الطلق
 ليتم بها حاجة المشي والتمتع فبحان من اعطى كل شئ ما يستقر اليه دون الزيادة والنقصان ولندكر
 بعض ما يتعلق باصناف الدواب ^{فرس} هو اجناس الحيوانات بعلا الانسان صورته واشد
 الدواب عدواً وذكاء وله خصايل محمودة واخلاق مرسية من ذلك حسن صورته وتناسب اجزائه
 واعضائه وصنائه وشدته وعدوه وحسن طاعته لفرسه كيف مر بها انتادت له ومن الخيل ما
 يقال له جوكاني وهو فرس يلعب على طهر بالكرة فلا يحتاج الى ركاب ان يصر فيها بل عينها الى الكرة كرات
 الكس بعد وحلها ومن الفرس ما يعرف صاحبه فلا يركب غيره من ركوبه ومن الخيل



ما يلحقه الى حتى يصر بها الطبيب الشيف قال محمد بن الشايب الكلبي ان الصائقات الحيات المعروفة
 على ثلثين عليه التلقات الفرس ومنهم من يسهلها عرفت والتهت عن صانعة العصر حتى توارى بالحجاب
 عرفها الا فرسانا لم تعمر عليه فوجد عليه قوم من الارذ وكانوا اعداء بان فلما ارادوا الرجوع قالوا يا سي الله
 ارضنا شاة زينة اذ ابلعنا اليها فاعط اسم فرسانا من تلك الخيل قال اذا نزلتم من افاضلوا عليه اعداء
 واخطبوا فانكم لا توردون نارا وقد اتى بطعام فتاروا بالفرس وكان لا مكال الى ان وصلوا الى بلادهم
 وموادك الفرس راى راكبا فذكر وان جبول العرب من تاجه انا خواص حرايه فتدب على
 الصبي يمشي لانه لم يترك تحت راسه من بعد ان نوبه نزول عند ذلك كحه بطرد الريح ومع ذلك

Fig. C. The Horse. Qazwīnī, *ʿAjāʾib al-makhlūqāt wa-gharāʾib al-mawjūdāt*. Wasit, 679 (1280). Munich, Bayerische Staatsbibliothek, Cod.arab.464, fol. 169r (Courtesy of the Bayerische Staatsbibliothek).

intellectual world typified by the scholars of late thirteenth-century Wasit, the painter's decision to narratively emphasize various stories in Qazwīnī's text points to the degree to which it simultaneously belonged to the newly emerging cultural world typified by the Turko-Mongol courts. The class of scholar/bureaucrats was linked to the traditional religious bureaucracy by training and to the leading Turko-Mongol families by their administrative roles. Operating at the intersection of two different social and cultural worlds, they would have appreciated a manuscript such as the 1322 manuscript that was simultaneously understandable according to both sets of intellectual and artistic expectations.

The illustrations document an interest in narrative in a range of ways. The illustration of the story of the traveler rescued by the Rukh draws attention to a narrative marked as such in the text by the word *hikāya*, or 'story.' The painting of gerbils illustrates a passage describing gerbils' social organization (Fig. 12) which easily lends itself to being approached as a narrative. According to Qazwīnī, gerbils have a *ra'īs* (a head or president gerbil). When they leave their burrows for food, it is the responsibility of the head gerbil to look out from one of the higher mounds of the burrows, and to warn the other gerbils if a predator approaches. If he fails in this responsibility, Qazwīnī notes, the other gerbils overthrow him, and choose a replacement. Instead of simply painting a representative of the gerbil species, the painter instead shows three gerbils interacting. As the two gerbils on the right start to venture out of their burrows, they look intently at a third gerbil on the left perched on a mound, presumably the head gerbil, as if to consult him.

Elsewhere, other visual strategies emphasize narrative aspects of the text. In the painting of the *tannīn*, the artist provides an image of a creature whose very form is the expression of the narrative of its outrageous life cycle (Fig. 9). Having started out as a land animal, the creature struts forth on two front legs, but having subsequently spent a period as a sea creature, it pulls its eel-like lower body through the waves. Other illustrations visually suggest incidental narratives not mentioned or implied in the text at all. Throughout the section on the planets, for example, the illustrations introduce pairs of angels pushing back the golden curtains of the day (Fig. 8). In the chapters on animals, animals are often shown in

pairs, implying a narrative of the regeneration of the species, even when this is not emphasized in the text (Fig. 6).

In conclusion, the 1322 Qazwīnī manuscript reminds us that in addition to considering how Ilkhanid courts did and did not impact cultural life in regions such as Iraq and Fars, it is also important to consider the lateral impacts which those regions had on each other. The class of scholar-bureaucrats which helped to administer these regions after the conquest not only connected these lands to each other, but also connected the old and new worlds associated with the visual, linguistic, intellectual, and artistic dimensions of manuscript culture. This was true in Fars as well as in Iraq. Replete with illustrations suggesting that its audience interpreted it simultaneously through the prisms of two different worlds, the 1322 Qazwīnī cosmography was very likely made for the class that bridged these spheres. The manuscript therefore offers itself as evidence of how the profound cultural transformation of this period was manifested in Fars. It indicates some of the ways in which the shift between what we call 'Arab painting' and 'Persian painting' was marked not only by ruptures, but also by continuities discernable to particular audiences.

CATALOGUE

CURRENT LOCATION: Istanbul, Süleymaniye Kütüphanesi, Yeni Cami 813

AUTHOR: Zakariyā' b. Muḥammad al-Qazwīnī

TITLE: *ʿAjāʾib al-makhlūqāt wa-gharāʾib al-mawjūdāt* (*The Wonders of Creation and the Oddities of Existence*)

VERSION: The same Arabic version of the text as the 1280 Wasit manuscript

COLOPHON: Fol. 181v (partly damaged) : "It was written by the weakest, the most lowly... and the most wanting of the slaves of God the Exalted... the Much Forgiving, Muḥammad b. Maṣūd b. Muḥammad b. Maḥmūd al-Hamad[ānī],³⁴ may God

³⁴ The last three letters of the scribe's name are missing, but this reading is confirmed by the colophon of a second manuscript by the same scribe. The second manuscript, dated 1329, is a copy of Qazwīnī's other text, the *ʾAthār al-Bilād* (*The Monuments of the Lands*). London, British Library, Or. 3623 fol. 173r.

rectify his nature, pardon his sins, and forgive his faults...in the year 722 [1322].”

NUMBER OF FOLIOS: 181

FOL. DIMENSIONS: 26.4 × 17.6 cm.

ILLUSTRATIONS: 462 contemporaneous with the manuscript; 4 sixteenth century illustrations.

SEALS AND INSCRIPTIONS ON THE FOL. 1R:

- (1) A large round seal of the Ottoman Sultan Ahmed III (r. 1703–1730)
- (2) A small lozenge shaped seal with a poetic couplet. The impression on the paper is clear except for the last word: “Oh Lord, by the Seal of the Messengers [*i.e.*, the Prophet Muḥammad]/Seal my [life? or work?] with good works” (*Yā rabb bi-khātim al-rusul/Ikhtam bi-l-ṣāliḥāt* [‘*umrī*? or ‘*amalī*?]).
- (3) An inscription written in the shape of a triangle: “A book of the wonders that God the Exalted crafted, by the glory of the ‘*ulamā*’, *mawlānā* the pillar of the religion, Zakariyyā’ b. Muḥammad b. Maḥmūd al-Kamūnī al-Qazwīnī of the progeny of Anas b. Mālik, servant of the Messenger of God, God’s blessing and peace be upon Him. May God the Exalted sanctify his soul, illuminate his grave, show him His mercy in the exquisite wine of the highest paradise, at the point of his rising and His morning draught/early morning radiance.”
- (4) An inscription written on the diagonal at the top left: a poetic couplet, as yet unread.
- (5) An inscription written horizontally at the top middle left: “Among the possessions of al-‘Abd ‘Abdī Salīm al-Baghdādī.”
- (6) An inscription at the lower middle left. Several words in the middle have been scribbled out. What remains reads: “Thanks to God. By way of contended...Kamāl al-Dīn owns it, may God pardon him.”
- (7) An inscription at the top left corner: “First.”

NOTE ON TRANSLITERATION

I have treated all terms including Persian species names as Arabic, in accordance with the prevailing language of the text.

INVENTORY OF EXTANT ILLUSTRATIONS AND RECONSTRUCTION OF ORIGINAL ORDER OF FOLIOS³⁵

Current folio numbers are used, but presented in the original order of their appearance.

Fols. 1v–2r: Frontispiece

Current folios 15r–v and then 30v–r originally fell between current 7v and 8r.

The Planets:

Fol. 8v: *An empty image space for a diagram of the heavenly spheres.*

Fol. 9r: *An empty image space for a diagram relating the orbits of different planets.*

Fol. 9v: The Moon (*al-qamar*).

A diagram of how the moon waxes and wanes in its orbit.

Fol. 10r: Eclipse of the Moon.

Fol. 11v: Diagram of the orbit of Mercury (*‘uṭārid*). Mercury.

Fol. 12r: Diagram of the orbit of Venus (*zuḥara*). Venus.

Fol. 12v: Diagram of the orbit of the sun (*shams*). The sun.

Fol. 13v: Diagram of a solar eclipse.

Fol. 14r: Mars (*mirrūk*).

Fol. 14v: Jupiter (*mushtarī*).

About 6 folios are missing, corresponding to Munich cod. arab. fols. 17–23. These likely had illustrations of Saturn; the Fixed Stars of the Northern Hemisphere; the Signs of the Zodiac; and the first examples from the chapter on the Fixed Stars of the Southern Hemisphere. In addition, all the current folios between fol. 14 and fol. 22r are misbound, so that after the missing original folios the text resumes on current fol. 22.

Fol. 22r: Draco (*shujā*).

Crater (*bātīyya*).

Corvus (*ghurāb*).

Fol. 22v: Centaurus (*qintūris*).

Lupus (*sab*).

Ara (*mijmara*).

Corona Australis (*al-iklīl al-janūbī*).

³⁵ For translations of the names of specific constellations and species, I have consulted the catalogues of other Qazwīnī manuscripts prepared by Badi' 1978; and by Carboni 1992; as well as the German translations by Hees 2002.

Piscis Austrinus (*al-ḥūt al-janūbī*).
 The Lunar Mansions (Northerly and Southerly):
 The Northerly Mansions (*al-manāzil al-shāmiyya*):
 Fol. 23r: First northerly mansion.
 Fol. 23v: Second northerly mansion.
 Third northerly mansion.
 Fourth northerly mansion.
 Fol. 24r: Fifth northerly mansion.
 Sixth northerly mansion.
 Seventh northerly mansion.
 Fol. 24v: Eighth northerly mansion.
 Ninth northerly mansion.
 Tenth northerly mansion.
 Fol. 25r: Eleventh northerly mansion.
 Twelfth northerly mansion.
 Thirteenth northerly mansion.
 Fourteenth northerly mansion.
 The Southerly Mansions (*al-manāzil al-yamāniyya*):
 Fol. 25v: First southerly mansion.
 Second southerly mansion.
 Third southerly mansion.
 Fol. 26r: Fourth southerly mansion.
 Fifth southerly mansion.
 Sixth southerly mansion.
 Fol. 26v: Seventh southerly mansion.
 Eighth southerly mansion.
 Ninth southerly mansion.
 Tenth southerly mansion.
 Fol. 27r: Eleventh southerly mansion.
 Twelfth southerly mansion.
The text for the thirteenth southerly mansion is not illustrated.
 Fourteenth southerly mansion.
 The Dwellers of the Heavens:
 Fol. 28v: The bearers of the celestial throne (*ḥamalat al-ʿarsh*), appearing in two horizontal registers joined in the middle of the page.
 The angel *al-Rūḥ*.
 Fol. 29r: The angel *Isrāfīl*.
 Fol. 29v: The angel Gabriel (*Jibrīl*).
 The angel Michael (*Mikāʾīl*).
Three original folios are missing, corresponding to cod. arab. 464 fols. 34r–37v. They probably had illustrations for Azrael; the angels of the seven heavens; the recording angels, and the fallen angels Hārūt and Mārūt. The current folio 16 is a substitute for the third. Originally, these missing folios were directly followed by the chapter on time, consisting of current folios 17–21 directly followed by current folio 31.

Fol. 31r: The Arab months (*al-shuhūr al-ʿarab*), illustrated with a calendar.

Fol. 41v: Space for a diagram of the winds, left blank.

Fol. 43v: The image space for the aureole, originally left blank, contains a sixteenth-century drawing of three men.

The image space for the rainbow, originally left blank, contains a sixteenth-century wash drawing of a rainbow over a swirling formation simultaneously suggesting a cloud and a dragon.

Fol. 45v: The image space for the Surrounding Ocean, also originally left blank, contains a sixteenth-century drawing of a dragon eating a fish.

Islands of the China Sea:

Fol. 46v: A winged-feline of the island of Sumatra (*Ḥānīj*).

An image depicting the following species of Sumatra: mountain goats like wild cattle, a cream-giving feline, and two types of monkeys.

Wild-winged people of Sumatra.

Fol. 47r: Wild people of the island *Rāmnī*.

Rāmnī island unicorn creature.

Fols. 46v–47r: The margins of these two facing folios are filled with partly painted drawings of men and beasts. A hunter with a bow and arrow, a second man with a club, and a third man appear among animals who chase each other.

Fol. 47v: A *wāqwāq* tree of *Wāqwāq* island.

Folio 48 is bound backwards.

Fol. 48v: “Something resembling a bird” (*shayʿ shibh ṭayr*). This is depicted as a pelican-like bird. A painted drawing in the left margin of a man pointing at the bird draws extra attention to it. As the folio is bound backwards he would originally have appeared in the outer margin. Below him there is less skillful drawing of another man in a similar posture.

Fol. 48r: Great serpents (*ḥayyāt al-ʿizām*). One of them is shown in the illustration.

India Sea:

Fol. 49v: Palace Island (*jazīrat al-qasr*), represented by three men standing in a doorway, each with the face of a dog at the back of his head.

Persian Sea:

Fol. 50r: Sea dragon (*al-tūn*).

A “green fish” (*samaka akḥḍar*) with proboscis. (It is depicted as white.)

A round fish (*samaka mudawwara*).

Fol. 50v: An amazing story (*ḥikāya ʿajība*): the enormous *Rūkh* bird carries a stranded man from Isfahan in flight.

Red Sea:

Fol. 51v: The great fish that attacks boats (*samaka ʿazīma yaḍrib al-markab*).

The fish with a face like an owl (*ka-wajh al-būm*) with another fish.

Fol. 52v: *Saksār* Island: dog-headed men.

Saksār Island continued: soft-legged men.

Fol. 53r: Saw fish (*al-minshār*).

Fol. 53v: Whale (*al-bāl*).

The Western Sea:

Fol. 54v: What Abū Ḥāmid also reported (*mā dhakara ayḍan Abū Ḥāmid*): a spotted yellow serpent and a rabbit-headed snake-tailed fish.

Fol. 55r: Mule fish (*al-baḡhl*).

Moses' and Joshua's fish (*ḥūt Mūsā wa-Yūsha'*).

Bulgarian cap fish (*samaka ka-'annah qalansūh bul-ghār*).

Fol. 55v: A flying 'swallow' fish (*khullāf*).

A fish known as 'the minaret' (*al-manāra*).

The Caspian Sea:

Fol. 56r: The Great *Tīn* (*al-tīn al-'azīm*), which is a huge sea dragon.

Fol. 56v: What Khusrāw Anūshirvān told (*mā ḥakā Anūshirvān al-Kasrā*) about a strange beast from the Caspian Sea.

Sea Animals:

Fol. 57r: Water rabbit (*arnab al-mā'*).

Water man (*insān al-mā'*).

Water cow (*baqar al-mā'*).

Fol. 57v: Crocodile (*timsāh*).

Fol. 58r: The *tannīn*. ('This is an enormous and destructive creature which was first a land animal, then a sea animal, and was finally exiled to the land of the Gog and Magog.')

Fol. 58v: Lamprey (*julkā*).

Dolphin (*dulfīn*).

Dhū bayān. ('This is a well-known fish with pharmaceutical properties.')

Electric Ray (*ra'āda*).

Fol. 59r: A blessed fish (*samaka mubāraka*).

A well-known fish from near Jerusalem (*samaka mā'rūfa tūjad nāhiyat bayt al-muqaddas*).

Crab, which is the first of two types, or the land variety, of *saraṭān*.

Fol. 59v: Lobster, which is the second of two types, or the sea variety, of *saraṭān*.

Skink (*saqanqūr*).

Fol. 60r: Tortoise (*sulahfā*).

Fol. 60v: Carp (*shabbūt*).

Skate fish (*shifnūn*).

Anchovy (*ṣīr*).

Frog (*dafila*).

Fol. 61r: Leech (*'alaq*).

Turtle (*ghīṭā*).

Fol. 61v: The "Water Horse" (*faras al-mā'*). (Though this term can mean "hippopotamus," the animal depicted prancing through waves looks like a horse with wings.)

Cetacean (*qālūs*).

Fol. 62r: Large Cetacean (*qītā*).

Beaver (*qunduz*).

Water hedgehog (*qunfūdh al-mā'*).

Fol. 62v: Narwhal (*qūqī*).

Otter (*kalb al-mā'*).

Shark (*kawsaj*).

Earth:

Fol. 64v: A blank image space accompanying the text on climes.

One folio is missing between current folios 66 and 67, corresponding to cod. Arab. 464 fol. 83b–84a. It probably had a painting of Mount Bisitūn.

Rivers:

Fol. 75r: The Nile (*nahr al-Nīl*), represented by six fish swimming among waves.

Despite the incorrect catch-word at the bottom of 78b, the text does read continuously from 78b to 79a.

Trees:

Fol. 95v: Myrtle (*ās*).

Ebony (*abnūs*).

Fol. 96r: Citron (*utruj*).

Plum (*ijjās*).

Fol. 96v: Melia (*āzād-dirakht*).

Gum Arabic (*umm ghaylān*).

Moringa (*bān*).

Turpentine (*buṭm*).

Fol. 97r: Balsam (*balasān*).

Oak (*ballūt*).

Apple (*tuffāh*).

Fol. 97v: Spruce (*tannūb*).

Mulberry (*tūt*).

Fig (*tīn*).

Fol. 98r: Sycamore fig (*jummayz*).

Walnut (*jawz*).

Fol. 98v: *Khusrāw dār*. ('This is a large tree.')

Castor oil plant (*khirwa'*).

Willow (*khilāf*).

Peach (*khawkh*).

Fol. 99r: Spiny cytissus (*dār shaysha'an*).

Elm (*dardār*).

Plane (*dulb*).

Fol. 99v: Laurel (*dahmast*).

Pomegranate (*rummān*).
 Fol. 100r: Olive (*zaylūn*).
 Fol. 100v: Cypress (*sarw*).
 Quince (*safarjal*).
 Fol. 101r: Sumac (*summāq*).
 Egyptian thorn (*samura*).
 Sandarac (*sandarūs*).
 Alum (*shabāb*).
 Fol. 101v: Chestnut (*shāhballūt*).
 Sandalwood (*ṣandal*).
 Pine (*ṣanaawbar*).
 Lentiscus (*ḏirw*).
 Fol. 102r: Tamarisk (*ṭarfā*).
 Juniper (*‘ar‘ar*).
 Milkweed (*‘ushar*).
 Gall oak (*‘aḡṣ*).
 Fol. 102v: Jujube (*‘ummāb*).
 Aloe (*‘ūd*).
 Service tree (*ghubayrā*).
 White poplar (*gharab*).
 Fol. 103r: Peony (*jāwāniyyā*).
 Pistachio (*fustuq*).
 Pepper (*filḡil*).
 Fol. 103v: Hazelnut (*funduq*).
 Lycium (*ḡilzahraḡ*).
 Clove (*qaranḡul*).
 Fol. 104r: Reed (*qaṣab*).
 Camphor (*kāḡḡir*).
 Fol. 104v: Grape vine (*karm*).
 Fol. 105r: Pear (*kummathrā*).
 Euphorbia (*lā‘iyya*).
 Fol. 105v: Frankincense tree (*lubān*).
 Almond (*lawz*).
 Lemon (*līmūn*).
 Fol. 106r: Apricot (*mishmish*).
 Fol. 106v: Banana (*mawz*).
 Orange (*nāranḡ*).
 Coconut palm (*nārḡl*).
 Syrian Christ-thorn (*nabiq*).
 Fol. 107r: Date palm (*nakhl*).
 Fol. 107v: Rose (*ward*).
 Jasmine (*yāsamān*).
Plants:
 Fol. 108r: Pimpernel (*ādḡān al-ḡār*).
 Calendula (*ādḡar-yūn*).
 Fol. 108v: Lemon-grass (*idḡḡhir*).
 Rice (*aruzz*).
 Spinach (*isḡānāḡḡ*).
 Squill (*isḡḡl*).

Thistle (*ushḡurghāz*).
Ishrās. (A plant with a gluey root.)
 Fol. 109r: Soda plant (*ushnān*).
 Absinth (*aḡṣintān*).
 Daisy (*uḡḡuawān*).
 Flax (*ukshūḡḡ*).
 Chamomile (*bābūnḡ*).
 Fol. 109v: White thorn (*bād-āward*).
 Balm (*bādḡarḡbūye*).
 Mountain balm (*bādḡarḡḡ*).
 Eggplant (*bādḡinḡān*).
 Fava bean (*bāḡilā*).
 Fol. 110r: Maidenhair fern (*barsiyāwishān*).
 Mugwort (*birinḡāṣḡ*).
 Onion (*baṣal*).
 Fol. 110v: Melon (*baṡḡḡḡḡ*).
 Wild onion (*bulbūs*).
 Violet (*banāḡṣḡḡ*).
 Fol. 111r: *Būdāyish*. (The best antidote to aconite.)
 Adonis (*bahār*).
 Aconite (*bāsh*).
 Lupine (*turmus*).
 Garlic (*ḡḡūm*).
 Fol. 111v: Millet (*jāwars*).
 Watercress (*jūrḡir*).
 Carrot (*jazar*).
 Fol. 112r: Manna plant (*ḡāḡḡ*).
 Thyme (*ḡāshā*).
 Cress (*ḡurḡ*).
 Artichoke (*ḡarshaf*).
 Harmel (*ḡarmal*).
 Caltrops (*ḡasak*).
 Fol. 112v: Fenugreek (*ḡulba*).
 Chick-pea (*ḡimmas*).
 Melilot (*ḡandaḡḡūḡ*).
 Colocynth (*ḡanzal*).
 Fol. 113r: Wheat (*ḡinḡa*).
ḡayy al-‘ālam. (An amazing plant that defends against poverty and need.)
 Tiger strangler (*ḡḡāniḡ al-nimr*).
 Mallow (*ḡhubbāzā*).
 Fol. 113v: Hellebore (*ḡharbaḡ*).
 Mustard (*ḡhardal*).
 Lettuce (*ḡhass*).
 Fol. 114r: Poppy (*ḡhashḡḡāsh*).
 Fox’s testicle (*ḡḡuṣā al-tha‘alab*).
 Dog’s testicle (*ḡḡuṣā al-kalb*).
 Althea (*ḡḡimḡ*).
 Red bramble (*ḡḡumḡḡum*).

Fol. 114v: Cucumber (*khiyār*).
 Gilly flower (*khārī*).
 Oleander (*diftā*).
 Fol. 115r: Fenugreek (*rāziyānāj*).
 Sorrel (*rīhās*).
 Sweet basil (*rayḥān*).
 Fol. 115v: Saffron (*zaʿfārān*).
 Indian spikenard (*sādaj*).
 Rue (*sadhāb*).
 Fol. 116r: Beets (*silq*).
 Sesame (*simsim*).
 Hyacinth (*sunbul*).
 Iris (*sūsan*).
 Fol. 116v: Watermint (*sisambār*).
 Earthsmoke (*shāhtaraj*).
 Dill (*shibitt*).
 Sea lettuce (*shibram*).
 Tree of Mary (*shajarat Maryam*).
 Fol. 117r: Barley (*shaʿīr*).
 Tulip (*shaqāʿiq al-nuʿmān*).
 Turnip (*shajām*).
 Fol. 117v: Sweet clover (*shinjār*).
 Hemlock (*shawkarān*).
 Coriander (*shūnīz*).
 Wormwood (*shīh*).
 Darnel (*shaylam*).
 Fol. 118r: Savoury thyme (*ṣaʿtar*).
 Tarragon (*tarkhūn*).
Ushrān. (A plant that guards against colds.)
 Lentils (*ʿadas*).
 Indigo Plant (*ʿizlīm*).
 Fol. 118v: Nightshade (*ʿinab al-thalab*).
 Radish (*fijl*).
 Fol. 119r: Purslain (*farfakh*).
 Cinquefoil (*fanjankusht*).
 Pennyroyal (*fūtanaj*).
 Wolf's bane (*qātil al-dhiʿb*), shown on the bottom left.
An extra plant for which there is no corresponding text is depicted at the bottom right of this page.
 Fol. 119v: Dog's bane (*qātil al-kilāb*).
 Tragacanth (*qatād*).
 Wild cucumber (*qiththā*).
 Safflower (*qirṭīm*).
 Fol. 120r: Cotton (*quṭn*).
 Spinage (*qunābirā*).
 Hemp (*qinnab*).
 Cauliflower (*qunnabūt*).
 Fol. 120v: Southernwood (*qayṣūm*).

Ox tongue (*kāwzawān*).
 Flax (*kaltān*).
 Leek (*kurrāth*).
 Vetch (*kirsanna*).
 Fol. 121r: Parsley (*karafs*).
 Caraway (*karāwiyyā*).
 Coriander (*kuzbura*).
Kakwāsha. (A plant that repels fleas.)
 Cumin (*kammūn*).
 Fol. 121v: *Kūrkadum*. (A kind of wheat)
 Truffle (*kamʿa*).
 Ivy (*lablāb*).
 Plantago (*lisān al-ḥamal*).
 Ash seeds (*lisān al-ʿaṣāfir*).
 Fol. 122r: Caper (*laṣaf*).
 Mandrake (*luḥfāh*).
 Lubia bean (*lūbiyā*).
 Dragon-wort (*lūf*).
 Water lily (*līnūfar*).
 Fol. 122v: Mung bean (*māsh*).
 Mezereon (*māzaryūn*).
 Cherry (*māhūdāna*).
 Mullein (*māhizharj*).
 Fol. 123r: Marjoram (*marzanjūsh*).
 Nard (*nārādīn*).
 Anise (*nānkhawāh*).
 Narcissus (*narjis*).
 Fol. 123v: Wild rose (*nīsrīn*).
 Mint (*naʿnaʿ*).
 Asparagus (*hiḷyawn*).
 Endive (*hindibā*).
 Fol. 124r: *Wars* (A Yemeni plant similar to sesame).
 Gourd (*yaqlūn*).
Animals:
Riding Animals:
 Fol. 145v: Horse (*faras*).
One folio is missing between current folios 145 and 146. It probably had paintings of the mule and the donkey.
 Fol. 146r: Onager (*ḥimār al-waḥsh*).
Livestock:
 Fol. 147v: Camel (*ibīl*). *In addition to the painted pair of camels in the image box, there is a partial drawing of a camel, stepping over a flowering plant in the margin.*
 Fol. 147r: Cattle (*baqar*).
 Fol. 148r: Wild ox (*baqar al-waḥsh*).
 Fol. 148v: Water buffalo (*jāmūs*).
 Giraffe (*zurāfu*).
 Fol. 149r: Sheep (*daʿn*).
 Fol. 149v: Goat (*maʿz*).

Gazelle (*zaby*).

Fol. 150r: Stag (*ayyil*).

Predatory Animals:

Fol. 150v: Jackal (*ibn āwā*).

Weasel (*ibn ʿirs*).

Fol. 151r: Rabbit (*arnab*).

Fol. 151v: Lion (*asad*).

Fol. 152r: Tiger (*babr*).

Fol. 152v: Fox (*thalab*).

Harīsh. (An animal like a small goat and having a single horn).

Fol. 153r: Boar (*khinzīr*).

Fol. 153v: Bear (*dubb*).

Fol. 154r: Marten (*dalaq*).

Wolf (*dhiʿb*).

Fol. 154v: *Sinād*. (An animal resembling an elephant that carries its young in its stomach after birth).

Fol. 155r: Squirrel (*sinjāb*).

Cat (*sinnawr*).

Wild Cat (*sinnawr al-barr*). This is a large feline species.

Fol. 155v: *Sayrānīs*. (An animal whose breathing makes a sound that attracts other animals).

Shādhawār. (An animal whose single horn makes a lovely sound in the wind).

Fol. 156r: Hyena (*dabu*).

Caracal (*ʿanāq al-ard*).

Fol. 156v: Goat (*ʿanza*).

Polecat (*falan*).

Cheetah (*fahd*).

Fol. 157r: Elephant (*fil*).

Fol. 157v: Monkey (*qird*).

Karkadān. (Though this word is often translated as “rhinoceros,” the animal depicted resembles a deer with a long single horn).

Fol. 158v: Dog (*kalb*).

Fol. 159r: Leopard (*namir*).

Stag (*yāmūr*).

Birds:

Fol. 159v: Finch (*abū barāqish*).

Nightingale (*abū harūn*).

Fol. 160r: Goose (*ʿwazz*).

Falcon (*bāzī*).

Fol. 160v: Sparrow hawk (*bāshiq*).

Parrot (*babbaghā*).

Nightingale (*bulbul*).

Fol. 161r: Owl (*būm*).

Pheasant (*tadrūj*).

Weaverbird (*tanawwut*).

Snake hatcher (*hadīnat al-afʿā*).

Fol. 161v: Bustard (*hubārā*).

Kite (*hidaʿa*).

Fol. 162r: Pigeon (*hamām*).

Swallow (*khuffāf*).

Fol. 162v: Bat (*khuffāsh*).

Francolin (*durrāj*).

Fol. 163r: Rooster (*dīk*).

Hen (*dajāj*).

Fol. 163v: Egyptian vulture (*rakhama*).

Rook (*zāgh*).

Fol. 164r: Starling (*zurzūr*).

Goshawk (*mazmaj* [*sic.*, not *zummaq*]).

Quail (*summānā*).

Gyrfalcon (*sunqur*).

Fol. 164v: Peregrine falcon (*shāhūn*).

Turtle-dove (*shifnūn*).

Green magpie (*shiqraq*).

Whistler (*ṣāfir*).

Saker falcon (*ṣaqr*).

Fol. 165r: Sea bird (*tāʿir al-baḥr*).

Peacock (*tāwūs*).

Growse (*tayhūj*).

Sparrow (*ʿusfur*).

Fol. 165v: Eagle (*ʿuqāb*).

Fol. 166r: Magpie (*ʿaqʿaq*).

ʿAnqā. (An enormous bird which once carried off a bridegroom from his wedding).

Fol. 166v: Crow (*ghurāb*).

Fol. 167r: Crane (*ghirnāq*).

Diver (*ghawwās*).

Collared turtle-dove (*fākhīla*).

Fol. 167v: Partridge (*qabj*).

Crested lark (*qubra*).

Sandgrouse (*qaṭā*).

Fol. 168r: Turtle-dove (*qumrī*).

Phoenix (*qūqnus*).

Crane (*kurkī*).

Curlew (*karawān*).

Fol. 168v: White Stork (*laqlaq*).

Heron (*mālik al-ḥazīn*).

Hoopoe lark (*mukāʿ*).

Vulture (*nasr*).

Fol. 169r: Ostrich (*naʿāma*).

Fol. 169v: Hoopoe (*hudhud*).

Martin (*waṭwāt*). This refers to a bird rather than to a bat in the modern sense of the word.

Ḥārʿa. (A small nocturnal bird.)

Wild pigeon (*yamāma*).

Creepers and Crawlers:

Current folio 177 is misbound and should appear here.

Fol. 177v: Viper (*af'ā*).

One folio is missing. It is likely to have had illustrations of a great serpent called the thu'bān; the locust; and the chameleon.

Fol. 170r: Fire ant (*ḥarruqars*).

Snail (*ḥalazūn*).

Fol. 170v: Earth worm (*kharāṭīn*).

Dungbeetle (*khaṭā*).

Fol. 171r: Silkworm (*dūd al-qazz*).

'The Demon's Rooster' (*ḍik al-jinn*). If it falls into wine and is buried in a pot under specified conditions it can ward off termites.

Flies (*dhubāb*).

Fol. 171v: Spanish flies (*dhuraḥraḥ [sic]*).

Tarantula (*rutaylā*).

Hornet (*zunbūr*).

Gecko (*sāmm abraṣ*).

Fol. 172r: Tortoise (*sulahfā*).

Cockroach (*ṣarrar [sic, not ṣurṣur or ṣarrār]*). The artist has illustrated this entry with a plant. It seems he misread the first part of the construct *bint wardān*, cockroach, written بنت, as *nabt*, plant, written نبت. *Ṣannāja*. (A beast of Tibet the very sight of which is lethal).

Fol. 172v: Lizard (*dabb*).

Fitchet (*ḡirbān*).

Fol. 173r: Ocellated skink (*'aḡāya*).

Scorpion (*'aqrab*).

Spider (*'ankabūt*).

Fol. 174r: *The following seven images all illustrate Qazwīn's extended entry on various types of fār (mice, rats, etc.):*

Mole (*khuld*).

Musk rat (*fārat al-misk*).

'Belted mouse' (*fār al-niṭāq*).

Bīsh Mouse. (A kind of mouse or rat that eats the poisonous *bīsh* plant.)

The aforementioned *bīsh* plant.

Fol. 174v: Gerbil (*yarbū*).

Samandal. (Not a salamander according to the modern meaning of the word, this species which can go into flames without burning resembles a rat or mouse.)

Fol. 175r: Hedgehog (*qunfudh*).

Fol. 175v: Tick (*nibr*).

Bee (*nahl*).

Fol. 176v: Varan (*waral*). (Though this is a large lizard species the artist depicts it as a bird.)

This folio is stamped with the seal of the Ottoman Sultan Ahmet III.

Concluding section, on Animals with Strange Forms:

Fol. 178r: The Gog and Magog (*yāyij wa-māyij*).

The *Munsuk* people (who have large floppy ears).

A people who live in some of the mountains near Alexander's wall (*umma fī ba'd al-jibāl yaqrub sadd al-Iskandar*).

A people of Sumatra (*umma bi-jazīrat al-ḡāmij*) who have wings.

Fol. 178v: A people of Ramni island (*umma bi-jazīrat al-Rāmnī*) who have red hair.

A people found in some of the islands of Zanzibar (*umma fī ba'd al-jazā'ir al-ḡanj*) who are blind.

A people in the islands of Zanzibar (*umma fī jazā'ir al-ḡanj*) who have the heads of dogs and the bodies of humans.

One folio apparently missing. It may have had illustrations of the following species: the soft-legged people; winged people with elephant heads; winged people with horse heads; double-faced people; double-headed multi-legged people; and chest-faced people.

Fol. 179r: Half people (*ummat al-nasnās*), and the human-headed tortoise with horns (*umma wujūhuhā ka-wujūh al-nās wa-ḡahruhā ka-ḡahr al-sulahfā*).

Giraffe (*al-ḡarāfa*).

Crossbreed between the horses and wild onagers (*al-mutawwalad min al-khayl wa-ḡumur al-waḡsh*). (The illustration shows a horse chasing an onager.)

Fol. 179v: Crossbreed between the bifurcated camel and the crow (*al-mutawallad min al-ibil al-fawālīj wa-al-ḡhurāb*)?

Crossbreed between a person and a bear (*al-mutawallad min an-insān wa-al-dubb*).

Crossbreed between a wolf and a hyena (*al-mutawallad min al-dhi'b wa-al-dabu*).

Crossbreed between a dog and a wolf (*al-mutawallad min al-kalb wa-al-dhi'b*).

Crossbreed between a pigeon and a ring dove (*al-mutawallad min al-ḡamām wa-al-warshān*).

Fol. 180r: The Giant 'ij.

Fol. 180v: The giant man (*rajul 'aḡīm*) in Bulgaria.

A person who is nine cubits tall (*insān ṭūluhu tis'a idhrā'*), in Mosul.

Fol. 181r: A person with the body of a woman from the waist down but two bodies from the waist up (*insān min wasaṭihi ilā asfalīhi badan imra'a wa-min wasaṭihi ilā fauqihi badanān*), in Yemen.

A bird in the form of a rook with a head like a person's (*ṭā'ir... 'alā shakl al-ḡāgh wa-ra'suhu ka-ra's al-insān*).

A winged fox (*tha'lab lahu janāhān*).

A woman whose offspring has two heads (*imra'a muwalladuhā la-hu ra'sān*).

Fol. 181v: A horned horse (*farasa lahā qarān*).

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SECTION 3

LITERARY MANUSCRIPTS

THE EARLIEST ISLAMIC ILLUSTRATED MANUSCRIPT, THE *MAQĀMĀT* AND A GRAVEYARD AT SUḤĀR, OMAN

Geoffrey R. D. King

I link two unlikely issues in this paper: on the one side is an illuminated manuscript in the Nationalbibliothek, Vienna, registered as Vienna Chart. Ar. 25612 (Fig. 1) along with several early *Maqāmāt* manuscripts, all illustrating Islamic graves (Figs. 2–5). On the other side is a little-known Jewish cemetery at al-Wuqayba on the outskirts of Suḥār in the Sultanate of Oman, once one of the most important ports of south-eastern Arabia for the Indian Ocean trade (Figs. 9–13).¹

My point of departure is D. S. Rice's discussion of Vienna Chart. Ar. 25612 which he reckoned to be the earliest Islamic illustrated secular manuscript and which he dated to the 9th century–10th century CE.² This manuscript and the early illustrated *Maqāmāt* manuscripts that he also addresses collectively provide evidence of the forms of certain types of early Islamic tomb, a subject on which we have little archaeological information.

Our knowledge of the earliest Islamic graves tends to be affected by their amendment, repair or reconstruction in later times. The issue has been

greatly complicated in Arabia where the earliest Islamic graves are to be found. In much of the Arabian peninsula, commemorative structures over respected graves have been demolished as a result of the Ḥanbalī Unitarian reformist teachings of Shaykh Muḥammad b. 'Abd al-Wahhāb, which have prevailed in many places in the peninsula since the mid-18th century CE. Consequently, whatever structures once marked the burial places of the first Muslims in the Hijaz and elsewhere have been levelled to the ground to conform with what is now regarded as early Islamic practice. It is only in those areas of Arabia where Wahhābī interpretations have never penetrated that this process has not occurred.³ However, even in these non-Wahhābī areas, a minimalist approach to grave marking often tends to prevail. There appear to be no Islamic graves recorded in Arabia so far that are

¹ I first visited the al-Wuqayba cemetery in April, 1997 and most recently I visited it on 9th January, 2006 to check points arising from this paper.

² Rice 1959.

³ For our information on early Islamic graves in Arabia, Egypt, Syria and Iraq we are better served by literary descriptions than by archaeology. For accounts of major Islamic graveyards, see the following: 'Abd al-Tawāb 1907; Hawary and Rached 1932/1939; Wiet 1936–1971; Hamidullah 1939; al-Harawī 1957; Miles 1957; Grabar 1966; Raghib 1972; al-Rāshid 1980, pp. 244–251; al-Rāshid 1993, pp. 421–422; Simpson 1995; *Thesaurus d'Épigraphie* 2003; al-Rāshid 2004; al-Thunayyān and al-Muraykhī 1427/2006.

akin to the tombs shown in Vienna Chart. Ar. 25612 and the early *Maqāmāt* manuscripts.

A number of early Islamic grave markers survive in cemeteries at Mecca, Medina, Badr al-Hunayn (Fig. 6), Bilād Banī Sulaym⁴ and al-Rabadha,⁵ all in western Arabia. These generally have Arabic religious inscriptions incised on naturally smooth rocks or on worked flat slabs of stone.⁶ Elegant and intricate early and mediaeval Islamic headstones are also found from Yemen through to Dhufār in Oman, belonging to a tradition that has echoes far across the Indian Ocean.⁷ Yet another tradition of Islamic grave markers is represented by stone *tābūts* from Sūq al-Khamīs in al-Baḥrayn, now in the National Museum of al-Baḥrayn (Fig. 7).⁸

Apart from these various types of grave marker, the most commonly encountered Islamic graves in Arabia as a whole are simply headstones, more often than not without any inscription whatever. Typical examples of such graves are those at Wādī Ḥaḡl in Ra's al-Khayma in the United Arab Emirates (UAE)

(Fig. 8). Similar Islamic grave markers are encountered all over Arabia and are probably of a very early Islamic tradition, but because of their simplicity, the lack of inscriptions and the fact that excavation of the Muslim dead is offensive in Islamic terms, such graves are extremely difficult to date.

None of these diverse Islamic grave types from Arabia, whether complex or extremely simple, is of the same design as those which are portrayed in Vienna Chart. Ar. 25612 and the *Maqāmāt*. Nor are they related in any way to the graves which are found in the mediaeval Jewish graveyard at al-Wuqayba. Yet the al-Wuqayba graves correspond very precisely in design to the Islamic graves shown in Vienna Chart. Ar. 25612 and in the early illustrated *Maqāmāt*. My assumption, therefore, is that there is some indirect link between the form of the graves shown in the early Islamic manuscripts discussed by Rice and the Jewish graves at al-Wuqayba.

VIENNA CHART. AR. 25612

Vienna Chart. Ar. 25612 is a two page manuscript, all that remains of a lost codex. It is heavily damaged but enough survives to assess to a degree its original character. It was found in Egypt at Fayyūm, the large oasis west of the Nile. It passed into the Archduke Rainer collection of *papyri* which is now held in the National Library in Vienna and it was initially published by A. Grohmann in 1929.⁹ Grohmann and Rice both attributed the manuscript to Egypt and Rice dated it to the 9th–10th century CE on epigraphic grounds.

It has an Arabic text written in the same style and hand on both of its pages, but on the *verso* there is also a painting of a tree with two graves set on either side of it. The graves are stepped with three tiers of stepping. They are painted with undulating floral motifs and the implication is that these stepped graves were plastered and it was this plaster that carried the paint.

Rice's main interest in his discussion of Vienna Chart. Ar. 25612 was to demonstrate that secular manuscripts with illustrations tied to the subject-matter of the given text existed from early Islamic times.

⁴ al-Anṣārī, plate A, after p. 679.

⁵ For al-Rabadha, see al-Rāshid 1993, pp. 402–428.

⁶ For Medina, the most important recent information is provided by Dr. Khalid Eskobi who has recorded very early Islamic gravestones near the holy city and has produced results of great importance both for our knowledge of the evolution of so-called Kufic script and the development of the Islamic grave marker (personal communication, al-Jawf, January, 2006). Professor Sa'd al-Rāshid has recently recorded some important very early stones inscribed in Kufic from al-Masqī, 'Asīr in south-western Saudi Arabia. Dr. Muḥammad al-Thunayyān and Dr. Muḥallāḥ al-Muraykhī have recently published tombstones from Sa'da in northern Yemen. All of these inscribed stones, both funerary and non-funerary, vary in style and vary in their degree of ornateness.

⁷ See al-Zayla'ī 1989. There are also finely carved standing tombstones of 14th century CE date at Zafar/Balīd in Dhufār (Oman) and I am indebted to Simon Aspinall for drawing my attention to a number of gravestones from Hasik in Dhufār, dated to ca 1130 (1717–18). There were related but, I believe, unpublished gravestones from southern Arabia in the museum at Aden which appear to have been looted during the Yemeni civil war of 1994. Domed graves exist in Musandam (Oman) at Ra's Shaykh Mas'ūd, near Khasab as well at Kumzār and at Qalhat (Oman). In the Ḥaḡramūt and elsewhere in Yemen there is a tradition of building domed tombs over the graves of respected holy men. The most important of such commemorative tombs is that of the Prophet Hūd.

⁸ These have parallels with a *tabūt* with a crested grave cover from Sirāf on the Iranian side of the Gulf, dated to 383 (993) now in the British Museum (registered as 91 7–81 1).

⁹ A. Grohmann in Arnold and Grohmann 1929, pp. 2–3, and pl. 1.

However, as a by-product of his principal concern, Rice's paper constitutes a seminal discussion on the form of early Islamic tombs in Iraq, Syria, Palestine and Egypt, built in brick and stone and dated from the 9th century CE onwards. He concludes that all the early Islamic graves illustrated in Vienna Chart. Ar. 25612 and in the related *Maqāmāt* are to be localised typologically and geographically to Iraq, Syria and Egypt.

Some of the Islamic graves illustrated in these manuscripts have headstones but their most consistent characteristic is that they are stepped structures. These graves in Vienna Chart. Ar. 25612 and in the *Maqāmāt* Rice juxtaposes with recent Islamic graves in Palestine that he saw in *ca* 1935 and in Syria in *ca* 1937. These have a remarkable similarity to those shown in Vienna Chart. Ar. 25612 and its cognates among the illustrated *Maqāmāt*. They are also all of a very similar design to the Jewish graves at al-Wuqayba, a site which was entirely unknown to Rice.

Rice concludes that the subject-matter of Vienna Chart. Ar. 25612 falls within the realm of the literary theme of fraught lovers. He suggests that the individuals in the Vienna manuscript are either 'Urwa and 'Afrā' or alternatively, 'Utba and Rayya. This theme of lovers buried beside each other, united in death, is favoured in early Arabic poetry. In Vienna Chart. Ar. 25612, the decisive words that associate the subject-matter with the deaths of blighted lovers are rendered by Rice as follows:¹⁰

[ḥatt]ā farrāqa al-mawt baynahum fa-hādihā qabruhum raḥimahum Allāh.

...until death did them part. This is their tomb. May Allah have mercy upon them.

Rice then takes the matter further and uses the form of the tombs in Vienna Chart. Ar. 25612 as a basis of comparison with the Islamic grave illustrations which occur in the following early illustrated *Maqāmāt* manuscripts:

Paris BN arabe 3929 fol. 26r, undated (Fig. 2);
Paris MS arabe 5847, fol. 29v, 634/1237;
St Petersburg MS S.23, fol. 65,¹¹ undated;

London, BL Or. 1200 fol. 29v, 654/1256 (Fig. 3);
London BL Or. 9718, fol. 39r, before 709/1310 (Fig. 4);

London BL Add. 22,114, fol. 21r, undated (Fig. 5).

He observes that representations of Islamic tombs in paintings are rare, that burial customs are conservative by nature and that regional peculiarities of grave types in the Middle East have survived for centuries and with tenacity.¹² It is a fair conclusion which he develops by discussing the typology of the Islamic tombs shown in Vienna Chart. Ar. 25612, in the *Maqāmāt* manuscripts and the related 20th-century tombs in Syria and Palestine.¹³ In formulating this typology, Rice subdivides the tombs in Vienna Chart. Ar. 25612 and the *Maqāmāt* manuscripts into those made of baked brick, those of masonry, and those of mud-brick. However, for the present discussion the matter of importance is that of form rather than of structural materials.

In his discussion, Rice addresses the unusual nature of the Vienna Chart. Ar. 25612 graves in the following terms:¹⁴

If we now turn again to the tombs depicted in the miniature of the Vienna fragment we see they fit neither the carefully executed brick structures nor the masonry-built tombs of the Ḥarīrī MS [Paris MS arabe 5847, fol. 29v]. There exists, however, a third variety of humbler graves roughly executed, with uncut stones, plastered with mud, whitewashed, and sometimes decorated with bright colours.

And again:

The tombs depicted in [Vienna Chart. Ar. 25612]—like their modern [Palestinian and Syrian] counterparts of which I reproduce a few...consist of three tiers and are provided with headstones (*shāhid*, pl. *shawāhid*). In the [Vienna] miniature we are shown side views of the narrow sides of each tomb with one headstone only.¹⁵

Of the *Maqāmāt* manuscripts showing tombs that are cited by Rice and which are listed above, he attributes Paris arabe BN 3929 to Iraq. BM Or. 1200 and London BM Or. 9718 he reckons to be from Damascus but he believes them both to be based on an Iraqi prototype. Rice's arguments seem reasonable in the case of both Vienna Chart. Ar. 25612 and the early

¹⁰ Rice 1959, p. 210.

¹¹ Rice 1959, pl. II.

¹² Rice 1959, p. 218.

¹³ Rice 1959, p. 219.

¹⁴ Rice 1959, pp. 218–9.

¹⁵ Rice 1959, p. 211.

illustrated *Maqāmāt* and it appears that we are indeed dealing with a tradition of painting that is essentially Iraqi and which had an impact on Syria and Egypt as well. Rice argues that the types of stepped grave that appear in Vienna Chart. Ar. 25612 and the *Maqāmāt* are regional in character, reflecting Islamic burial practice Iraq, Syria and Egypt, persisting in rural Palestine down to the 20th century.

However, what we know of very early Islamic burial suggests that such stepped tombs were not common and they do not seem to be represented among the very oldest Islamic burials found in western, central and south-eastern Arabia, judging by extant early Arabian Islamic grave-types. This is an important point, for although the stepped Islamic grave type of Vienna Chart. Ar. 25612 and of the early illustrated *Maqāmāt* is apparently absent from Arabia in all periods, the very same Islamic stepped grave type form appears throughout the Jewish graveyard at al-Wuqayba. An explanation is required, therefore, to understand why the stepped Jewish graves at al-Wuqayba should be so similar in design to the stepped Islamic graves in Vienna Chart. Ar. 25612 and in the *Maqāmāt* illustrations.

THE AL-WUQAYBA CEMETERY

The al-Wuqayba Jewish cemetery lies in the midst of the palm groves to the west of the town-centre of Suḥār on the Bāṭina coast of Oman (Plates 9–13). I only located it because Dr Monique Kervren, the director of the French team that had excavated at the Suḥār *qal'a* some years ago, had mentioned it in the entry 'Suḥār' in the new edition of the *Encyclopaedia of Islam*.¹⁶ According to Dr. Kervren, the cemetery dates to the 12th–13th century CE, an assessment based on epigraphic evidence derived from Hebrew inscriptions that she identified at the site. However, I could not locate any of these inscriptions myself. I assume that they have disappeared in the course of the deterioration of the site since it was visited by Dr. Kervren.

The cemetery is in a walled compound on the south-east side of the al-Wuqayba traffic roundabout, about 50 m. back into the palm groves, among mod-

ern buildings.¹⁷ A stand of trees separates the main graveyard from a smaller group of graves. The majority of the graves are located in the south-eastern area of the compound. There are at least 122 of them, although there may be more than this as some have deflated or have collapsed or have been reduced to a few scattered bricks. The graves all lie with their longer side running east-west (60°/240°) and they are all constructed of baked brick and are generally rectangular. They are stepped, usually with five or six steps and they look like diminutive pyramids or ziggurats. They vary in size, but most measure about 3 m. × 2.40 m. At least one grave was small and was probably that of an infant.

The baked bricks of which these grave markers are made are fixed with mortar. Originally a white lime plaster covered the bricks, just as in Vienna Chart. Ar. 25612 and its late parallels recorded in Palestine and Syria by Rice. There is no evidence now that the al-Wuqayba graves were painted but as they once had on them the Hebrew inscriptions which Dr Kervren mentions, I assume that the inscriptions were on the plaster coating that has now vanished from most of the graves.

The graves lack headstones, and to that extent they conform to a strand of Sephardic practice. Many of these graves have been severely eroded or undermined by water-flow. Others have animal burrows under them or they seem to have been damaged by illicit excavation. There is a certain amount of pottery scattered around the graveyard including the usual unglazed later Islamic red and black wares of the so-called Julfār type, and there are some Khunj/Bahlā' glazed wares which indicate activity in the later Islamic period. I also noted a very eroded blue glazed body sherd that could be Sassanian/early-Islamic but I hesitate to use it as evidence of dating, given its poor condition and the fact that it was a surface find.

The remains of a large baked brick structure (Fig. 13) stand at the north-western end of the cemetery but its purpose is unclear and Dr Kervren made no suggestion as to its origin. It is well built and substantial and the single surviving wall lies on a north-south axis. The rest of the building has

¹⁶ Kervren 1997.

¹⁷ It is 1.75 km. from the Suḥār Friday *Sūq*, north-east of the al-Wuqayba traffic roundabout.

vanished but I assume that it continued to the east. Excavation would probably reveal wall traces to confirm or contradict this assumption. I cannot but wonder that, as the remains are clearly those of a major building, this was a synagogue associated with the cemetery.

These stepped Jewish graves at al-Wuqayba, that look in form so much like the stepped Islamic graves in Vienna Chart. Ar. 25612 and the subsequent *Maqāmāt* manuscripts, are in sharp contrast to the Islamic graves in the rest of Arabia described above. The question that then follows is how an Islamic stepped tomb type portrayed in Vienna Chart. Ar. 25612 and the related *Maqāmāt* manuscripts reached Suḥār where it came to be used in the large and well-established Jewish graveyard in the suburb of al-Wuqayba.

SUḤĀR AND THE JEWISH TRADING SYSTEM

Suḥār faces out to the Gulf of Oman and the Indian Ocean. It was the principal port of the south-eastern Arabian Bāṭina coast by the 10th century CE and it probably served this purpose much earlier. As a commercial town it was one of the successors of Sirāf on the Iranian shore which had declined by the end of the 10th century. In its most prosperous periods, Suḥār traded with Iran and with India, south-east Asia, the Far East and east Africa. Its archaeological remains include what is probably one of the largest tells anywhere along the coast of Oman or the Arabian shore of the Gulf.

By the 10th century CE, the Suḥār agricultural hinterland had reached its maximum extent and its cultivated area was far larger at that date than it was by the 1970s when the area was first surveyed by archaeologists. It was irrigated by a system of sophisticated *aḥlāj* (canals) descending from the Jabal Ḥajar to the west of the town. It was first described in detail by A. Williamson as a result of fieldwork that he commenced in 1973, and he observed that the traces of Suḥār's 9th–10th century CE agricultural system then were probably better preserved than those at any similar site in the Near East.¹⁸

¹⁸ Williamson 1973; Costa and Wilkinson 1987.

As to the international trading system of which Suḥār was so important a part, there is a great deal of evidence. One Ishāq of Suḥār, a Jewish trader, became extremely rich by 229 (912). He had left Oman for the east with less than 200 *dīnārs* and he came back with a ship load of musk, silk, porcelain, jewels, precious stones and other rare merchandise from China. When he was arrested in Oman because of his newly gained wealth, the traders of Suḥār wrote to the Abbasid Caliph telling him that merchants would no longer call there and the town's trade would be ruined.¹⁹ It is clear enough from this that Suḥār was a city whose China trade was sufficiently important for the Caliph at Baghdad to take heed of the merchant community's concerns.

S. D. Goitein repeatedly shows in his great study of the Cairo Geniza documents that there was a sustained commerce conducted by Jewish merchants operating between Egypt, Iraq and India in the 11th century CE.²⁰ The information regarding Ishāq of Suḥār and that provided by the Cairo Geniza texts is corroborated by Benjamin of Tudela, a Jewish traveller from Spain who visited Baghdad and the Gulf in the reign of the Caliph al-Mustaḍīr (566–575 (1170–1180)). Benjamin records Jewish communities at al-Ḥilla and Babylon,²¹ at Basra, Kish and al-Qaṭīf and elsewhere in the area.²² Of Kish, he says that it was a considerable market with merchants bringing their goods from India and the islands and from Mesopotamia, Yemen and Persia, and that there were about five hundred Jews there. It is in this context of trade that a Jewish community at a flourishing port like Suḥār must also be understood.

Given the evidence of Jewish trade into the Indian Ocean from Cairo, it could be argued that the al-Wuqayba graves reflect an influence stemming from the Jewish commercial connection between Egypt and India, passing *via* Suḥār. However, as we have seen, the painting tradition of the Vienna

¹⁹ *Sohar Fort Museum* 1996, p. 43. I am grateful to Dr. Mark Beech of the Abu Dhabi Authority for Culture and Heritage for drawing my attention to this text.

²⁰ Goitein 1967–1993. He also refers repeatedly to his unpublished *India Book*, based on the Geniza documents. This volume is promised for publication in 2007.

²¹ Benjamin of Tudela 1983, pp. 102–106; Benjamin of Tudela undated, I, pp. 106–112.

²² Benjamin of Tudela 1983, pp. 118–9; I, Benjamin of Tudela undated, I, pp. 136–137.

manuscript and the *Maqāmāt* was taken by Rice as being ultimately Iraqi in origin with an impact in both Syria and Egypt. This interpretation allows for the stepped Islamic graves that are represented in these manuscripts to be as likely Iraqi in origin as Egyptian or even both. For such stepped graves to re-appear in a Jewish context at al-Wuqayba could therefore point to a connection between Suḥār and Iraq as well as with Egypt.

The Suḥār Jewish community would have looked west to Egypt and east to India in the course of trade but it would certainly have looked north to Baghdad for its religious and judicial leadership. The Jewish religious leadership in Baghdad held a highly respected position in the later Abbasid period, among Jews and Muslims alike. The Baghdad *yeshivas* (religious seminaries) were the greatest centres of Jewish scholarship in the Middle East and the Gaons and rabbis there administered and advised the Jewish community in Arabia as a whole in both a judicial and religious sense. Insofar as the Jewish communities of all of Arabia deferred to the judgements of the chief Gaon of Baghdad, it seems inevitable that this was also true of the Jews of Suḥār who buried their dead in the al-Wuqayba cemetery.

The Cairo Geniza documents refer to the great size of the Iraqi Jewish community, a community far larger than those of either Egypt or Palestine in this period.²³ Goitein says the following of the *yeshivas* of Baghdad:

Glowing descriptions of the splendour of the Babylonian yeshivas also exist...and letters of salutation were not confined to times of distress. By chance, the Geniza has preserved copies of a dossier of letters sent by a Gaon of Baghdad to Yemen and Yamāma, that is to southwest and central Arabia.²⁴ The letters show that the yeshiva [of Baghdad] had representatives in many small places all over the country [Arabia], that it was well informed about each of these men, and that the communities sent their donations regularly [to the Gaon of Baghdad].

Apart from its primacy in terms of religious scholarship, Iraq was also a centre of Jewish pilgrimage, associated by tradition with the Old Testament prophets Ezekiel and Ezra, and it was visited by Jewish pilgrims from among the traders on their

way between Egypt and India. The prophet Ezekiel's tomb in southern Iraq was especially appropriate to visit as he was the patron of seafarers.

The Geniza evidence of the primacy of the Jewish leadership in Baghdad, its Gaons and its rabbis, the respect in which they were held by the Abbasids and the manner in which they dominated the Jewish communities of the Gulf region and Arabia in the 12th century CE is supported by Benjamin of Tudela who says:

BAGDAD is inhabited by about one thousand Jews, who enjoy peace, comfort and much honor under the government of the great king [the Caliph al-Mustaḍīr]. Among them are very wise men and presidents of the colleges, whose occupation is the study of the Mosaic law.²⁵

He speaks of Baghdad's ten colleges and the scholarship of their rabbis and the descent of some from prophets. Describing the practice of the rabbis acting as judges for their communities, Benjamin says:

The principal of all these [Rabbis] is R. Daniel Ben Chisdai, who bears the titles of: PRINCE OF THE CAPTIVITY and LORD and who possesses a pedigree, which proves his descent from king David. The Jews call him 'Lord, Prince of the captivity' and the mahomedans: 'Saidna Ben Daoud'...and he holds great command over all Jewish congregations under the authority of the Emir al Mumenin [the Abbasid Caliph, al-Mustaḍīr]...²⁶

Benjamin continues:

The authority of the PRINCE OF THE CAPTIVITY extends over the following countries viz: over Mesopotamia; Persia; Khorassan; Saba which is Yemen, Diarbek; all Armenia and the Land of Kota near mount Ararat...and as far as the frontiers of the provinces and cities of Tibet and India".²⁷

With such a geographical range of authority allowed by the Islamic authorities to the Gaons and rabbis of the Baghdad *yeshivas*, and the respect in which the Jews themselves held their scholars in 'Babylonia', it seems inevitable that the well-established Jewish community at Suḥār would have been in contact with the Gaons and rabbis of Iraq and their practices.²⁸ This

²³ Goitein 1967–1993, II, p. 11; Goitein 1967–1993, V, p. 298.

²⁴ Yamāma corresponds to central Najd, the area in the vicinity of Riyadh in modern Saudi Arabia.

²⁵ Benjamin of Tudela 1983, p. 99; Benjamin of Tudela undated, I, p. 100.

²⁶ Benjamin of Tudela 1983, pp. 99–100; Benjamin of Tudela undated, I, p. 101.

²⁷ Benjamin of Tudela 1983, pp. 100–101; Benjamin of Tudela undated, I, pp. 102–103.

²⁸ Jewish communities are recorded in the Gulf area in later times. See Tavernier 1676, p. 238; Teixeira 1902, p. 168; Fischel 1949–50; and Fischel 1950.

framework of an oecumenical Islamic world, in the world of the dialogue of civilizations, is the context in which the stepped Islamic tombs in the manuscripts discussed by Rice could reappear in the al-Wuqayba graveyard of the Jewish community at Suḥār. Tomb types deriving from Iraq or Egypt may well have been shared by Muslims and Jews so that the stepped Islamic graves of Vienna Chart. Ar. 25612 and the *Maqāmāt* could be paralleled with the stepped Jewish graves at al-Wuqayba. I would not suggest, however, a direct connection between the manuscripts and al-Wuqayba but rather propose that all these stepped graves belong to a broad generic type.

It seems that in the case of the Islamic grave illustrations in the manuscripts discussed here and the al-Wuqayba cemetery, we are in that area of shared forms and interlinked cultures that reflects the relationship of Islam, Judaism and Christianity in the mediaeval Middle East. It is in such a framework that a Jewish tradition of grave construction in the Suḥār suburb of al-Wuqayba could parallel an Islamic tradition of grave construction of contemporary Iraqi, Syrian or Egyptian derivation.

This paper is a speculation in many respects and there are points of linkage which I have not properly concluded to my own satisfaction. For further research, one needs to know, for example, to what extent stepped tombs were used by both the Muslims and the Jews of Iraq, Egypt, Palestine and Syria in the early Islamic period. It would also be interesting to look at Jewish graveyards at Kish, Hurmūz and other places in the Gulf and Iraq and to compare them with the al-Wuqayba graves. Little or no research has been done on this issue as far as I am aware, although a rather poor quality, late Jewish gravestone from Ra's al-Khayma in the UAE has been published by D. Frank.²⁹

The graves shown in the manuscripts cited here and those at al-Wuqayba belong to a world where Islam and Judaism, along with Christianity, lived side by side and shared each other's forms and were aware of, and respected, each other's culture. Vienna Chart. Ar. 25612, the *Maqāmāt* and the al-Wuqayba cemetery are all anchored in that world. We owe a debt to D. S. Rice, a distinguished Jewish scholar of Islam, for bringing together the academic

mechanisms for understanding that distant mediaeval world, a Middle East more rational and reconciled than that of the time in which I write this paper, the world of 2006.

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²⁹ Frank 1998.

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LOVE LOCALIZED AND SCIENCE FROM AFAR: ‘ARAB PAINTING,’ IBERIAN COURTLY CULTURE, AND THE *ḤADĪTH BAYĀD WA RİYĀD* (VAT. AR. RIS. 368)

Cynthia Robinson

The title of this paper when it was first presented was rather different from the present one, and it contained the phrase, ‘problems of text and image.’ Here, those words have been removed, and replaced with ‘Arab Painting’ (in quotes) and a reference to Mediterranean courtly culture. The title’s change has, in addition to the usual peregrinations followed by a project between its initial presentation and its publication date, several explanations, and their enumeration and brief explication will serve as an introduction to the present essay. First, had I allowed the words ‘problems of text and image’ to remain, readers would have assumed that I intended to treat, in detail and at length, relationships between the text and the images of the *Ḥadīth Bayād wa Riyād* (Vat. Ar. Ris. 368). This matter, however, has already been addressed in another publication, and I stand by the conclusions reached there: that the manuscript’s almost certainly early-13th-century image programme is superior in quality to the text, particularly in terms of the relatively unsophisticated linguistic register of the latter; that the images were specifically conceived and placed in order to illustrate and explicate the love story they accompany; and that, particularly in the second half of the manuscript, they also serve (per-

haps with a humorous intent) as a visual handbook for would-be courtly lovers attempting to overcome the ravages of lovesickness while remaining this side of acceptable courtly etiquette, but still ‘get the girl’ in the end.¹ The present essay will address, instead, the stylistic affiliations of *BR*’s images within the larger group of images deemed by scholarship to compose the category of ‘Arab Painting,’ and will explain this relationship through emphasizing an aspect of the images which has not, to date, been given much attention: their subject matter. This, in turn, requires a consideration of the genre of text they accompany. *BR*’s text recounts the trials and tribulations of a young Syrian dandy named Bayād who accompanied his father, a merchant, to al-Andalus. Left to his own devices while his father exercised his trade, the young man saw, atop a tree,² a beautiful slave girl (Riyād)

¹ See Robinson 2001.

² This motif in itself, as I have argued elsewhere (Robinson 2006a), is almost certainly indicative of the text’s contacts with western or European romance tradition. It appears in the 17th-century, much-shortened and significantly changed Maghribi version of the story in Chester Beatty Library 4120, also addressed in Robinson 2006; in CBL

as he wandered, one day, among the gardens along the shores of the river Tharthār. He recited verses to her, made a date with her, and (of course) fell in love with her at first sight. In order to aid him in reaching his goal, he engages the aid of an Old Woman (the text's 'ajūz), medieval Mediterranean mediatrix par excellence. She succeeds in introducing him into a *majlis* held in the palace of the lady, or *Sayyida*, to whom Riyād belongs, but the *majlis* proves to be disastrous for the hero's hopes because, after an excess of love-song singing, his beloved openly and sincerely declares her love for him, thus committing an unforgivable breach of courtly etiquette and occasioning her separation from her beloved. The remainder of the plot consists of efforts on the part of various mediators, including the 'ajūz, to reinstate the girl into her mistress' good graces, and to reunite the lovers. The text is a combination of unrhymed prose and notably pedestrian poetry, with much of the latter dedicated to fully explicating the miseries of lovesickness.

To a one, and as might be expected, *BR*'s images are concerned with love, and particularly with courtly love; this, more than anything else, serves to distinguish them from the 'Central Islamic' images from which they are generally assumed to derive. None of the other text-image groups examined in this collection deals with similar subject matter, nor am I aware of a single 12th- or 13th-century illustrated manuscript from an Arabic-speaking context that does. Although stories concerned with love and its practice certainly continued to circulate during the centuries in question, it appears that they had considerably greater cultural visibility in al-Andalus than they did elsewhere in the Arabic-speaking regions of the Islamic world. I consider this fact to be of capital importance in the determination of the relationship between these Andalusī images and their 'Central Islamic' counterparts. Moreover, although image programmes do not appear to have been produced to accompany love stories, courtly or otherwise, in the 'Central Islamic Lands' during the 13th century, a

substantial percentage of the European or Romance secular manuscripts concerned with the theme of love from that period were lavishly illustrated. As I have argued extensively in a forthcoming publication, *BR*'s text would almost certainly not have been written in the form that it was had it not been for contact with European romance traditions, particularly the *roman idyllique*.³ The necessity to produce an image programme for a text for which a visual tradition did not yet exist, I believe, explains the complex relationships the *BR* images exhibit with, on the one hand, their 'Central Islamic' counterparts and, on the other, luxury objects of markedly local relevance.

* * *

The image programme of *BR* is generally accepted as an example of 13th-century Andalusī 'Arab painting.' In other words, the paintings are consistently characterized as, on the one hand, being derived from the traditions of book painting proceeding from the so-called 'Central Islamic Lands,' but, on the other hand, as being distinguished by clear and easily identifiable local traits (most often signaled are architectural details; these, indeed, have served best to convince scholarship at large of *BR*'s Andalusī provenance).⁴ In terms of their relationship to their purported eastern models, the images are almost always qualified, as in Ugo Monneret de Villard's very first discussion of them, as *retardataire*.⁵ In terms of their relationship to other Andalusī objects, the similarities to date observed by scholars are, principally, formal; the fact that subject matter (that of the courtly soiree, or *majlis*) also unites paintings and objects into a group has not been considered.

³ Robinson 2006a. Relationships between *BR* and the *roman idyllique* will also be taken up in Robinson 2006b.

⁴ These associations have been strengthened recently by work done by Antonio Almagro (Almagro 1999) on the two-levelled, Almohad-period patio known as the *Casa de la Contratación* and located within the Sevillian *Reales Alcázares*. The *Sayyida*'s gardens, within the palace where a great deal of the action takes place, appear to definitively correspond to this quintessentially 'high-end' Andalusī prototype, and the recent identification of other patios of this sort within the compound of the *Alcázares*, one of which appears to have been built during the 14th century under the patronage of Pedro I 'El Cruel' de Castilla, attests to its continued popularity and cultural significance following the Christian [re-]conquest of the Almohad capital.

⁵ Ettinghausen 1962.

4120, the fact that Riyād is up a tree is treated as '*min al-'ajā'ib*'—among the strange things—that happened to the two lovers along their road toward union, an indication that the motif was not recognized as 'belonging' to the tradition of *jāriya* stories from which the other short narratives in the collection proceed.

The concept of marked and consistent formal similarities between examples of 'Arab painting' produced across several centuries and in far-flung areas of the Arabic-speaking regions of the Islamic world, first described by Ettinghausen and refined, for this collection and the conference out of which it grew, by Oleg Grabar, will here serve me as one of the bases from which to argue that the presence of an actual 'Central Islamic' model before the artists who carried out the illustration programme of *BR* is not necessary in order to explain it.⁶ Rather than always receiving 'Eastern' models to be copied, it seems that, while al-Andalus participated quite self-consciously in the culture of what it imagined (and, certainly, in part knew) to be the larger community of Arabic-speaking Muslims in the eastern regions to which so many Andalusīs travelled for trade, pilgrimage, study or some other purpose,⁷ it also almost immediately adapted cultural forms 'from the East' to fit its own specific and localized concerns and tastes. And in so doing, it often significantly altered them.

* * *

BR's image programme consists of a rather unique frontispiece, which would appear to represent a sort of *dramatis personae*, followed by 13 images that are easily divided into groups. The first are counselling or didactic scenes. The first of this group appears on fol. 2v (Fig. 1); the second occupies fol. 15r (Fig. 2). Both represent the 'ajūz counseling her young protégé in the ways of noble lovers, both of today and of yore. The 'ajūz is shown in profile, as she is throughout the image programme. On 15r, she gestures animatedly with both hands, in the attitude of one who speaks or seeks to impart information. Bayād and the 'ajūz are debating the nobility (or lack thereof) of love.

The second group consists of interior scenes, which represent key incidents of the narrative. On fol. 3v, and occupying most of the page, we find Riyād laid out in a dead faint, surely a portent of disasters to come, brought about by the mere mention of her soon-to-be beloved by the 'ajūz. The Old Woman

appears, solicitous, in the background, recognizable now because of her profile and her signature green cloak and veil. Second, the image on fol. 22r represents the intimate interior of a 'dār,' or house, again with typically Andalusī, Almohad-period characteristics, located beside the river, where Bayād has gone, once more, in hopes of having news of his beloved (Fig. 3). Here, he receives another message from Riyād through the mediation of three of the *Sayyida*'s slave girls. On fol. 29r,⁸ we find Bayād asleep, lying on his side (just as the text specifies) atop a stack of luxurious cushions, having given in to his exhaustion as he composed a letter to his beloved; writing implements and a bookstand (the text does not inform us whether he was reading poetry or the Holy Text) are clearly visible in the background. In the final image, Bayād plays a game of chess with the Old Woman's relative. Both men are dressed in their accustomed courtly finery, seated on the floor, bare-foot and facing a chessboard, displayed vertically. The 'ajūz approvingly observes the pair of them from the 'margins'—she is shown, in profile and veiled in green, wielding a crooked stick and unmindful of the grizzled 'lovelocks' which peep from beneath her head covering, to the left of the picture plane, just as she enters the room. As in the case of the previous category of images, while the frontal rendering of interiors—which simultaneously gives information concerning setting and more perspectively-rendered details of the building in which the scene is taking place—is typical of illustration programmes produced during the 13th century in the so-called 'Central Islamic Lands,' I do not consider the details of these 'Central Islamic' images to be sufficiently similar to their Andalusī counterparts to warrant proposing one's having served as the model for the other.

The three images on fol. 4v, fol. 9r, fol. 10r all represent successive moments of the *Sayyida*'s *majlis*, during which love songs are sung, wine is drunk, and devastating cases of lovesickness are visited upon the two protagonists. In the first, severely damaged, image, Shamūl performs at the instigation of her

⁶ For the illustrations, see Grabar 1984, and for more accessible reproductions of some images (Grabar's come in the form of microfilm), see Guthrie 1995.

⁷ For Andalusīs who travelled extensively see the fifth chapter, or *bāb*, of al-Maqqarī 1967.

⁸ The image appears to have bled, probably due to moisture damage, onto fol. 28v; this folio may have been left blank in order to accommodate an image that was ultimately never produced. These latter folios of the manuscript, in any case, are extremely poorly preserved.

Lady. In the second image, Bayāḍ has arrived at the *majlis*, been interviewed by the *Sayyida*, and prevailed upon to perform (Fig. 4). In the third image, Riyāḍ performs. The *majlis* is clearly considered by the authors and producers of the manuscript as the key moment in the narration, given that it receives more than six full folios of the thirty-four that survive (much of this space is, of course, occupied by the love lyrics which are to a great measure ‘responsible’ for the cases of lovesickness), and merits three out of the manuscript’s fourteen extant illustrations. *BR*’s images have very clearly been conceived with this particular narrative, as well as its accompanying verses, in mind, and the overriding importance of the garden as a suitable setting for the activities depicted (and one might even say a suitably courtly setting—as the *‘ajūz* comments, ‘kings [and royalty] love parties in gardens!’) is a characteristic which finds no immediately obvious parallel among the eastern corpus of images. Rather, this is a characteristic which gives us particularly important clues as to the group of texts with which *BR*’s anonymous author(s) were most likely familiar and in which they were interested, and al-Ḥarīrī’s *Maqāmāt* does not figure among them.

Whereas all of the categories of images discussed thus far are, at least in part, related to a type (teaching scene, interior, *majlis* scene) which may be identified in most of the texts from the ‘Central Islamic Lands’ which include image programmes, the fourth, and perhaps the most interesting, group of *BR* images appears to have been specifically conceived in order to illustrate the pivotal moments of the narrative (Riyāḍ’s ostracism; Bayāḍ’s nadir-point in terms of lovesickness; the joyous reunion of Riyāḍ with her lady). They are the richest in detail and compositional complexity, and are, in 13th-century terms at any rate, almost entirely ‘original.’ As I have argued elsewhere, several elements of these three images are perhaps best explained by local Christian precedents.⁹ On fol. 13r, Riyāḍ’s tragic separation from her Lady is depicted. The setting, again, is the palace gardens, but a different area from that which witnessed the disastrous events of the *majlis*. The centerpiece is a pond (*birka*), upon whose deep blue surface a pair of ducks swims happily. Bronze stags, highly reminiscent

of actual fountain ornaments which have survived from the archeological context of the caliphal-period Madīnat al-Zahrā’, spout copious streams of water into the pond, which forms part of a sunken garden, surrounded by raised walkways. Both Almagro and Navarro have remarked on the ‘typically Andalusī’ features of this garden¹⁰—its tall, lush cypress, its layout, the pavilion beneath which the *Sayyida* sits, the little greenhouse-like structure which contains some delicate vines. Riyāḍ stands on one side of the pond, atop a small flight of steps (a rabbit, possible signal of lasciviousness, frolics beneath another set of stairs).

A similar, ‘absolutely Andalusī’ pronouncement may be made concerning the image, appearing on fol. 17r, of a forlorn but now cautiously hopeful Bayāḍ receiving the first of what are to prove several heart-rending missives from his lovesick beloved, whose health has deteriorated—as the veiled messenger-ess, Shamūl, informs him—to the point of near-death. Likewise, the well-known image of Bayāḍ fainted dead away beside a *norīa*, or water-wheel, while the Old Woman’s relative intones an improvised funerary lament (*riṭhā*) over his prostrate form (fol. 19r) is specific to the story and representative of what appears to be a distinctly Andalusī tradition of ‘Arab painting’ (Fig. 5). The palace beside which Bayāḍ, after intoning the same love lyric an unspecified but undoubtedly large number of times, has succumbed to his despair is indisputably an Almohad-period one. Final among this group, fol. 27r contains the scene in which the long-awaited reunion between Riyāḍ and her *Sayyida*, largely thanks to the *‘ajūz*’s mediation, takes place. Attention is focused exclusively on the dramatic moment at hand—not even the usual architectural details detract from the pathos of the prostrate Riyāḍ (there is perhaps, in this image, a carpet, thus saving the heroine from the indignity of lying directly on the ground).

* * *

The first analysis made in any scholarly forum of *BR*’s image programme appeared in Monneret de Villard’s essay in the journal *Bibliofilia* in 1941, shortly

⁹ Robinson, 2006a, pp. 94–96.

¹⁰ Almagro 1999; Navarro 1995.

following the manuscript's 'discovery'¹¹ in the collection of the Biblioteca Apostolica Vaticana.¹² The Italian scholar posited a derivative position for the Andalusī images vis-à-vis their eastern counterparts, proposing that the Andalusī artist or artists had access to a putative illustrated copy of *BR*, presumably produced in the 'Central Islamic Lands,' which 'he... kept before him.'¹³ The *BR* images also, however, represent, for Monneret, a 'not entirely successful' copy of the 'Mesopotamian tradition,'¹⁴ given that they possess a number of characteristics (he notes particularly architectural details) that are 'uniquely Spanish.'¹⁵ In other words, according to Monneret,

¹¹ By placing the word 'discovery' between quotation marks, I mean to signal that the work appears in catalogues of the Biblioteca Apostolica Vaticana long before 1940, but the manuscript's debut onto the scholarly scene unquestionably takes place with Nykl's publication (Nykl 1941) of his edition and translation into Spanish of the text and, by Monneret de Villard, of the (still only extant) analysis of its image programme (Monneret de Villard 1941).

¹² Monneret de Villard 1941, pp. 215–216.

¹³ Monneret de Villard 1941, p. 216.

¹⁴ Monneret de Villard 1941, pp. 212–214. Also included is a discussion of the technical differences between the two principal schools of 'Arab Painting' as this latter was conceived by Monneret's generation: the Baghdad/'Mesopotamian' school appears to favour placing the scene represented directly onto the un-painted/treated paper, whereas the 'Mawṣilī'/Jazīra school evidences a distinct preference for covering the background with a single colour, often red, or sometimes a distinct tint of blue from that which has been used in the composition of the image proper. Monneret notes, also, that this latter feature is characteristic both of Christian and Islamic manuscript production in the region, and that the two traditions demonstrate many other characteristics in common (pp. 212–213), naming several other manuscripts in support of his point. In terms of the type of background preferred, *BR* is much more similar, of course, to the 'Baghdad' school than it is to that of Mosul. The same is true for correspondences with this group in terms of the 'absolute lack of perspective of any sort,' which Monneret appears to feel is more characteristic of the 'Baghdad' school than of that of Mosul. On p. 213, Monneret gives a detailed description of the path through which the artist(s) of *BR* transformed perspectivaly-rendered buildings into the peculiarly flat, frame-like device which characterizes all represented interiors of the Andalusī manuscript, pointing out marked similarities with manuscript illustration techniques of the 'Mesopotamian' school, and making particular note of the *Manāfi' al-Hayawān* of Ibn Bakhṭīshū in the Morgan Library in New York, as well as with the copy of the *Maqāmāt* belonging to the Oriental Museum in St. Petersburg (Russia; former USSR). Here, he mentions particularly the well-known barbershop scene from this manuscript, but notes that the latter is '...di valore però infinitamente superiore al nostro [!].'

¹⁵ Monneret 1941, esp. pp. 216–217.

the eastern model kept before the artist as she or he laboured to produce the *BR* images was, whether at the instance of the patron or as a result of a decision of the artist him- or herself, 'edited,' principally in order to introduce elements of 'local flavour'.

Monneret does not appear to find problematic the idea of an artist's selective use of a model in this way,¹⁶ nor does he appear to see the weaknesses introduced into his theory by the fact that there is no evidence whatsoever that *BR* as text or as story is of 'Eastern' origin;¹⁷ nor may any similar literary phenomenon be cited for the Arabic-speaking east at such a late date. He should perhaps have paid greater attention to dates, because they prove to be the most serious problem for the 'direct Eastern influence' argument. The 'Baghdad school,' at least as far as manuscript painting is concerned, is very much a phenomenon of the middle decades of the 13th century rather than the early ones; certainly, no scholar has ever argued that any of the extant illustrated copies of the *Maqāmāt*—or eastern-manufactured, illustrated copies of the other key, non-scientific and non-religious texts, such as the *Kalīla wa Dimna*, for that matter—date prior to the first

¹⁶ I, on the other hand, do find it problematic and it is certainly not what usually happens when texts and their accompanying images are copied and transmitted.

¹⁷ Although this possibility might, upon first consideration, appear to be suggested by a 17th-century Maghribī manuscript in the collection of the Chester Beatty Library (CBL 4120), in which a version of the *Ḥadīth Bayṭ al-Riḥāḍ* appears in the company of stories concerning, in large majority, either the great lovers of the *jāhiliyya* or of the Abbasid period, the story stands out from the rest in terms of a number of its details. These will be discussed in greater detail in a paper currently in preparation for a conference on 'Arab Stories,' Université de Liège, September 2005; many thanks to the members of the selection committee of the conference for bringing this manuscript to my attention. Moreover, it is not identical to the version of the narrative as it exists in Vat. Ar. Ris. 368, and neither of the two appear in the 13th-century collection of such stories compiled by Ibn Sa'īd al-Andalusī (Ibn Sa'īd, 1973), thus suggesting that it is, at the very least, possible that one or both versions of the story were native, not to the 'Central Islamic Lands,' but to al-Andalus. The story had attained, by the 17th century, a canonical status similar to those imports by which it was, undoubtedly, to a certain degree inspired, and for that reason was incorporated into the collection in the Chester Beatty. It is also arguable that that status had not been obtained during Ibn Sa'īd's lifetime and, for that reason, it does not appear in his collection. An Abbasid provenance is doubtful, for it is not mentioned by Ibn al-Nadīm.

decades of the 13th century.¹⁸ Indeed, in order to enable the scenario he has sketched, it was necessary for Monneret to propose, seconding an opinion offered earlier by Giorgio Levi della Vida, an early 14th-century date for the *BR* images, and thus for the manuscript. More troubling still for the 'direct Eastern influence' theory is the fact that even the more commonly accepted early 13th-century dating for *BR* poses significant problems for the presence of any putative illustrated copy of a full-fledged example of the 'Baghdad school' of illustration, for example, of al-Ḥarīrī's *Maqāmāt*, before the artists responsible for the Andalusī book's visual programme. Rather, it is probable that the *BR* images were produced at a moment exactly contemporary to, or even slightly earlier than, the 'Central Islamic' ones.

Most subsequent writers, indeed and unsurprisingly, have disagreed with Monneret's dating;¹⁹ this is true even of Nykl, whose translation of the text into Spanish was published in the same year as Monneret's study. Despite their almost unanimous dating of the *BR* images to the 13th century instead of the 14th, however, and despite the fact that even those dates do not add up (in Monneret's defense, it should be noted that his dates *do* add up), later scholarship has nonetheless concurred with Monneret's 'derivative' assessment, generally evidencing either an implicit or an explicit privileging of the *Maqāmāt* images (again, in Monneret's defense, it should be noted that this particular slant was not part of his original argument). Grabar, for example, after enumerating the 'local' characteristics evidenced by the *BR* images as did Monneret before him, ultimately returns to the probability of eastern influences, particularly those of the *Maqāmāt*, having dictated the production of the

Andalusī examples, seemingly without consideration of the 'date problem'.²⁰

Similarities between eastern and western Arabic manuscript painting are often discussed in terms of general composition principles and renditions of the details or props of daily life. Monneret, for example, highlights the image in which the Old Woman observes a slumbering, drooling Bayād, who has apparently dozed off during an attempt to write a love letter to his beloved; he concentrates particularly on the bookstand visible behind the snoozing Syrian Romeo. As *comparanda*, the Italian scholar cites an illustration from Vaticano Siriaco 559, dated to 1219–1220 CE, noting that the Andalusī bookstand is 'identical' to those rendered in eastern examples.²¹ Bookstands, however, are rather ubiquitous possessions among the literate sectors of medieval Arabic-speaking (and reading and writing) culture the Islamic world over. One might occupy several lines of this page with a list of images from a variety of provenances and sorts of texts that include them. Moreover, the two images discussed by Monneret do not evidence further or more general similarities, and again, I would insist on the importance of taking into account the accompanying texts, which have nothing to do with one another. Rather than providing evidence of copying of the eastern examples by Andalusī artists, then, I would suggest that the bookstands (and pen-boxes and quill-cutters represented in the same *BR* image), as well as cups, bottles, and other accoutrements of a life which has attained a certain status, level of education or refinement (and which, when examined closely, are not really 'identical' at all), are items indicative of a loosely shared material culture resulting from shared religion, language, trade, etc., but whose particularities, unless imported, would probably be traceable to their geographic points of origin. In other words, although striking parallels between the two bodies of images are maintained by most scholars to be present, once one closely scrutinizes the rendering of drapery folds, facial types, architectural details and other particulars, the importance of these diminishes. Does this mean that 'Eastern influence' is to be discounted altogether as a factor? Not at all, as shall be

¹⁸ As I have argued elsewhere, the political circumstances of al-Andalus during the final decades of the 12th century and the first half of the 13th make it very unlikely that *BR* was produced after the decline of the Almohad state in the 1230's and 1240's. This does not mean that I consider the manuscript related to Almohad court spheres, however; as I have also argued, I believe that to be unlikely, and have proposed as more probable provenances either the court sphere of one of the Almohads' Muslim opponents or an urban, mercantile context. See Robinson 2006a, pp. 113–116.

¹⁹ Monneret de Villard 1941, p. 210. See also Levi della Vida, 1939; citation *apud* Monneret.

²⁰ Ettinghausen *et al.*, 2001, p. 261.

²¹ Monneret de Villard 1941, p. 213, note 17.

seen in a later section of this essay. The arguments, though, need to be based on grounds other than scholarship's presumption that the driving forces of Andalusī culture always wanted or needed an eastern product to 'get them started.' First, however, the other strain of the *BR* images' pedigree must be introduced and analyzed.

Discussion of 'local influences' in the *BR* image programme begins with Monneret de Villard's first analysis of the image programme; as mentioned, he notes particularly architecture and its ornament.²² Although Monneret's Iberian *comparanda* come exclusively from the medium of manuscript painting, Grabar also notes strong similarities between *BR*'s image programme and the images which adorn other luxury objects produced in the Iberian peninsula during the approximate period of *BR*'s production, particularly textiles.²³ And the most striking comparisons are, in fact, offered by three textiles, two of which fall squarely within the Almohad period in terms of their chronologies; the third is almost certainly evidence of Nasrid workmanship of the early 14th century. The first is an object known as the 'Pillow (*almohada*) of Queen Berengaria.'²⁴ Against a red silk velvet background crossed by two gold bands containing pseudo-kufic inscriptions, a roundel is located in the centre of the piece, where two female figures with facial features strikingly similar to those which characterize the visages of Bayāḍ, Riyāḍ, and the *Sayyida* dance round a central stem or tree of life. The pillow is probably roughly contemporary to, or perhaps slightly earlier than, the production of *BR*.

The second two pieces were probably hangings. Almost certainly dating to the 13th century is a well-known, tapestry-woven silk, a fragment of which is now in the collection of the Cooper-Hewitt Museum in New York, known to scholarship as 'The Drinking Ladies.'²⁵ At the center of brightly colored roundels separated by bands of star and floral motifs are symmetrical and facing pairs of large-eyed, dark-haired ladies, strikingly reminiscent of the bevy of slave girls

who populate *BR*'s images. Each woman's round, moon-like face is framed by luxurious lovelocks, recalling the hairstyles preferred by both the *Sayyida* and her *jawānī*, and each is dressed in patterned, and doubtless costly, fabrics. Grabar even suggests that the textiles were possibly inspired by the manuscript paintings, with the usual alterations that result from change in medium (in this case, details such as facial expressions and drapery folds lose a bit in spontaneity upon their translation from the painting to textile medium). At any rate, whether chicken preceded egg or vice versa, the relationship between paintings and silks is clearly a direct one.²⁶

The 'Arabness' of the textiles has not often been questioned, but a recent study by María Feliciano places them within a decidedly Castilian cultural sphere,²⁷ and the objects bearing these images which have come down to us indicate that the aesthetic was a shared one between the Christian Castilian court and at least some members of Andalusī society. Members of the Almohad court, however, were probably not among them, given their propensity to avoid just such sumptuary ostentation as that engaged in by Berengaria's dancers, *BR*'s characters and both 13th- and 14th-century 'Drinking Ladies.' These latter exhibit important similarities with the pre-Almohad paintings from the *Qasr al-Ṣaghūr*, in the region of Murcia, and it would seem that both striped silks and representations of drinking or dancing personages were spurned by the notoriously repressive Berber dynasty.²⁸ The same might be affirmed for their subject matter: both paintings and objects are consistent in their representations of the Andalusī *majlis al-uns*—the drinking of wine, dancing and the singing of love and wine songs by courtiers and slave girls who fit the topoi of medieval Andalusī desirability, according to its literature and poetry of courtly love, at any rate, to a 't.'

It is important to emphasize, moreover, that they do not simply form part of the often invoked 'courtly' or 'princely' cycle of the larger context or category of 'Islamic Art.' These textiles and paintings, in other words, appear to have selected the courtly *majlis* as a focus, reflecting a tradition which began during the

²² Monneret 1941, p. 215, note 16 also cites interesting similarities with the Beatus manuscripts, and the Bibles of Roda and of León.

²³ Ettinghausen *et al.*, 2001, p. 287, fig. 474.

²⁴ For the pillow, see Dodds 1992, no. 89, p. 321.

²⁵ See Glick *et al.*, eds., 1992, cat. no. 106; it is also pictured on p. 10; its provenance is less certain than that of Berengaria's pillow; see also Herrero 1988.

²⁶ Ettinghausen *et al.*, 2001, pp. 281–282, fol. 460.

²⁷ Feliciano 2005.

²⁸ See Viguera Molins in Navarro 1995 pp. 105–116.

fitna period at roughly the same historical and cultural moment at which the culture of courtly love became an official court one in al-Andalus. These remain a coherent group of motifs in this, as I have termed it elsewhere, ‘anti-Almohad’ context, despite the fact that they are probably no longer welcome ‘at [the Almohad] court.’²⁹ As shall be seen in the conclusion, the potential connection to the court sphere of the Castilian kingdom represented by the textiles, as well as the implied disconnect with the Almohad one represented by the courtly subject matter, are key to the interpretation of the manuscript in its most immediate cultural context.

* * *

Although Monneret ultimately rejects his second explanation for the perceived ‘dual nature’—i.e. the presence of both eastern and Andalusī features—in favour of the actual presence of an ‘Eastern model’ in front of the Andalusī artists or artisans as they conceived *BR*’s illustration programme, it is in fact the one I find the most viable: he considers the possibility that the ‘Mesopotamian’ characteristics apparent in the illustrations of *BR* had already entered into the manuscript illumination practices of al-Andalus, and thus were in a sense ‘naturalized’ at the point in time when the manuscript was produced. Although the suggestion, again, is made based on purely stylistic and formal considerations, this is indeed an explanation which appears to successfully account for the presence of both eastern and local characteristics in the images, for the discrepancy between content and subject matter between eastern and Andalusī products, and for the ‘chronological problem’.

But we remain without an adequate explanation for those similarities—interiors, bookstands, books—between the *BR* image programme and manuscript paintings produced further east which have elicited so many of the scholarly pronouncements examined in the preceding sections of this chapter, and which, while hardly ‘identical,’ as Monneret claimed, are also consistent and undeniable. None, indeed, of the ‘Eastern influences’ observed and explicated in the extant scholarship on *BR* is as convincing, or seems to require an explanation as insistently, as do the trees which grace the *Sayyida*’s garden in all

three of the *majlis* scenes and one which appears in an image from the St Petersburg *Maqāmāt*.³⁰ The trees in question are slender of trunk, with sinuously curved branches sprouting individually delineated leaves, not thick enough to obscure the bright sky. At the tip of each branch is a round, red/orange-tinted fruit, perhaps a pomegranate or an orange. The reasons for my privileging of these similarities over those exhibited in renditions of the objects of daily life (bottles, bookstands, cups, curtains or textiles) can be summed up as follows. While both eastern and western representations of the objects of material culture mentioned above are generally fairly accurate, as can be determined upon comparison between the representations of the objects in their respective eastern and Andalusī contexts and actual, corresponding objects produced in those regions, the same cannot be said for the trees, highly stylized and not easily identified as any particular sort of tree through the examination of leaves, fruit or other characteristics. Indeed, the most notable similarities they evidence—despite other important points of dissimilarity between the two groups of images in question—are with one another. Therefore, these are probably the result of some sort of contact between the two traditions of manuscript illumination, and their elucidation will hold the key to the nature of the ‘Eastern influence’ which informed the production of the *BR* illustration programme.

Several scholars concur concerning the tendency in the medieval Islamic world for scientific book illustration to precede by some decades the documentable presence and popularity of illustrations in ‘literary’ books, much as did the illustration of bibles, psalters and Christian liturgical books the systematic illustration of literary texts such as the Arthurian romances of Chrétien de Troyes at roughly the same historical moment as that which concerns us here. Both Grabar and Guthrie posit a similar chronological order—from the illustration of scientific manuscripts to that of secular ones for the purposes of edification and entertainment³¹—as a partial explanation for the *Maqāmāt* illustrations, with illustrated copies of the Arabic translation of Dioskurides’ treatise *De*

³⁰ See Guthrie 1995, Colorplate 18.

³¹ Ettinghausen *et al.*, 2001, pp. 260–262; Guthrie 1995, pp. 20–21.

²⁹ See Robinson, 2006a, pp. 97–100; 113–20; 144–6.

Materia Medica being deemed particularly important in this process. A productive comparison for *BR* is the case of the *unicum* illustrated copy of *Varqa va Gulshah*, probably produced in Anatolia during the 13th century. Grabar mentions as a possible source for the images an illuminated copy of Pseudo-Galen, dated to 1199 and housed today in Paris, pointing, again, to an earlier tradition of scientific and medical illustration having heavily impacted the emerging characteristics,³² both regional and international, of images produced to accompany secular narratives designed to entertain and/or edify.

Despite the fact that the survival of scientific manuscripts from an Andalusī context is much less well documented than it is for the ‘Central Islamic Lands,’ the process was arguably similar there. Monneret cites at least two such manuscripts produced either in al-Andalus or within the Maghribī cultural sphere that could easily occupy a position relative to *BR* similar to that of the Syrian Dioskurides relative to the *Maqāmāt*.³³ These examples signify the presence of a production industry for scientific texts which appears to have co-existed with and probably preceded the more secular branch of the industry to which *BR* belongs. Indeed, the potential 12th-century transmission of eastern-produced illustrated copies of the Arabic translation of the Dioscorides to al-Andalus (although we know the text was also translated there during the caliphal period) is of particular interest to the solution of the ‘tree problem’ with which this section opened. Both this work and the two known illustrated copies of the *Kūtāb al-Diryāq*, studied in the present volume by J. Kerner,³⁴ the presence of which in al-Andalus is not attested by any extant copy (although such a scenario is not only not impossible but quite likely) are potential links in the chain of associations which would explain the striking similarities between the sinuous, fruit-bearing trees in the *BR* images and those of the *Maqāmāt*.

Both of these texts would (at least partially, in the case of the *Kūtāb al-Diryāq*) fit the categorization of illustrated ‘herbals,’ also discussed in the present collection by Michael Rogers,³⁵ who notes that only a very small percentage of the herbals produced in Arabic-speaking contexts during the medieval period were illustrated. Rogers qualifies these as ‘texts for professionals and professors, not for dilettantes or amateurs,’ and also notes that the copyists or scribes were probably ‘members of the guild,’ as opposed to the less specialized copyists which we might imagine for works such as *BR*, or even for the *Maqāmāt*. Rogers also notes that the production of herbals probably involved at least a certain amount of ‘fieldwork,’ but suggests that, given that the majority of these texts were not illustrated, it is fair to argue that their ‘correctness’ was rooted, not in their illustrations, but rather in the verbal descriptions given of specimens... hence, perhaps, the presence of stylized and ultimately rather unidentifiable, but strikingly similar, tree-bushes, not only in the herbal tradition itself, but in the eastern and Andalusī literary texts under consideration here.

It is more likely that an illustrated copy of one of these texts would have been seen by a non-specialist than an un-illustrated one, and this suggests at least a possible scenario through which certain techniques and ways of representing plants could have been transmitted from regions further east to al-Andalus, probably at a date somewhat earlier than the actual production of *BR*, and certainly independently of whatever textual tradition we ultimately decide to link to *BR*. Given the wide variety of media in which similar trees appear in the east, their depiction appears to have become generalized throughout all genres of images, and thus we should certainly not imagine, on the basis of similar renditions of trees, any particular link between the *BR* images and those which accompany the *Maqāmāt*.

Finally, Grabar and Guthrie concur in the probable importance of local Christian image-making traditions in the formation of the Arab illustration tradition represented by the *Maqāmāt* images. Guthrie posits the derivation of certain figures from local

³² Ettinghausen *et al.*, 2001, note 312.

³³ Monneret 1941, p. 212; Bibliothèque Nationale, Paris, Arabe 2850; see de Slane 1883, pp. 513–514; citation *apud* Monneret. He mentions, likewise, Vaticano Rossiano 1033. In reference to astronomical and scientific manuscripts produced in the Maghreb, Monneret describes them as ‘copie di copie di prototipi orientali...’

³⁴ See the essays by J. Kerner and M. Rogers in this volume.

³⁵ See also Leclerc 1960.

Christian images of priests,³⁶ while Grabar cites other borrowings from Syrian Christian traditions of manuscript illustration: 'The influence of Greek originals is especially clear in the three-dimensional modeling of figures by means of shading and the relatively natural fall of garment folds.' The colophon of one example discussed by Grabar contains expressions in Syriac, alluding both to the site of provenance/production and to a hybrid context of production.³⁷ Again, very similar contacts and processes appear to have been at work in the context which produced the illustration programme of *BR*. Monneret observed formal similarities between the Andalusī images and illustrated bibles produced at a slightly earlier period in the Christian regions of the Iberian peninsula.

To sum up, then, I would characterize the 'origins' of *BR*'s image programme as follows. The first three of the categories into which I divided them earlier—frontispiece, interior and teaching or counseling scene (perhaps particularly the latter two)—are the ones from among *BR*'s images which have been most frequently compared to manuscript illustrations from the 'Central Islamic Lands,' and this for one simple reason: they are the most similar. No one, to my knowledge, has suggested eastern models for any from among the fourth and most 'original' category of *BR*'s image programme, and I have not been able to find any. As noted, the frontispiece, interior and teaching or counseling scenes do find parallels among the *Maqāmāt* illustrations, but they also find parallels in illustrations to earlier books on medical or scientific themes produced in the 'Central Islamic Lands'—one might mention here the Topkapı Dioskorides, proposed by Grabar as a comparison for the two scenes in which the 'ajūz instructs Bayāḍ. The similarities, as observed, are not such that one would ever imagine the two manuscripts having been produced in the same workshop, or even in the same city—they appear, to co-opt a phrase from Samuel Armistead and James Monroe from a discussion of Celestina and her Muslim sisters, to be 'generic rather than genetic.'³⁸ Teaching scenes belonging to other genres of text were easily transformed into the

two narrative images of the 'ajūz counseling Bayāḍ, and interiors were readily adapted to accommodate the fainting Riyāḍ; to the slave girls, some days later, delivering the latest missive to the hero; to the distraught young man's chess game with the 'ajūz's relative, and to his 'sleeping-and-drooling' scene. *BR*'s *majlis* images, on the other hand, almost certainly find their most likely sources in the material tradition of ceramics and textiles, themselves related to the context and description of the Andalusī *majlis al-uns* (as mentioned, of course, it is equally possible that the manuscript images, or others like them, served as models and inspiration for the creation of a corresponding 'courtly' material culture). Perhaps Almoravid- or pre-Almohad-period wall paintings similar to those of which fragments were found in Murcia, in which musicians and performers were portrayed, also contributed. What needed inventing, however, and practically from scratch, were the more narrative 'garden' scenes, and it is for this reason that these are the most 'typically Andalusī' in the details they offer to the viewer's gaze. Indeed, this perhaps explains the fact that arguments in favour of the 'local influences' present in *BR*'s images are almost always based on the architectural details of the *Sayyida*'s garden and palace.

In conclusion, I would like to return briefly to a few of the observations made in the introduction concerning the textual genre of *BR*, its probable novelty in al-Andalus during the late-12th or early-13th century, and the necessity of providing it with a programme of images.³⁹ As stated, I do not believe that either the text or the images of *BR* bespeak a particularly direct relationship with the Almohad court sphere. The architectural details often discussed as evidence of such a relationship could be used equally effectively to argue a Murcian provenance for the manuscript, in which case it would belong to a decidedly anti-Almohad context, in political terms at any rate. Moreover, the rather generic character of the (largely absent) *hājib*, the *Sayyida*'s father, who is not named as connected to any particular court or ruling power, would seem also to be related to extra-Almohad spheres of power.

³⁶ Guthrie 1995, pp. 18–20.

³⁷ Ettinghausen *et al.*, 2001, pp. 260–262.

³⁸ Armistead and Monroe 1989.

³⁹ The following remarks represent a summing up of much more extensive arguments made in Robinson 2006a, pp. 1–15.

BR's text exhibits very self-conscious intertextual relationships with the *ghazal* and the *khamriya*, with literature surrounding the royal *majlis*, and with handbooks of courtly behaviour and lore, as well as an awareness of 'ahl al-*ishq*' narratives (particularly *Majnūn Laylā*),⁴⁰ and of pithy descriptions in both Hebrew and Arabic of the 'ajūz as a vile and disgusting old pimp (albeit she is here transformed into a good soul and an arbiter of properly courtly behaviour).⁴¹ None, however, of these pieces of *comparanda* is sufficient to explain *BR*, particularly in view of the 'happy ending' toward which the plot appears to be heading in the final folios of the manuscript. Rather, the story most closely resembles the structure of the *roman idyllique*, in which two young and naïve lovers are forced by circumstances to abandon the paradisiac gardens of the initial stages of their love and discovery.⁴² They must then brave all manner of dangers and overcome seemingly insurmountable odds to achieve, in the end, both union and happiness, as well as recognition and sanction of that union by the very forces—often social and symbolic of the political—which sought to keep them apart. As several critics of European romance have recently argued, the genre appears to hail from the Pyrenean region, and it seems increasingly likely that at least one version of its best-known representative, *Floire et Blanchefleur*, originates, not in France at all, but in Iberia.⁴³ At any rate, it was well known to Alfonso X, and was similarly so to the Nasrid court of Muḥammad V—as will be detailed in a forthcoming publication, it is represented in the 'enigmatic' images which adorn the ceilings of the *Palacio de los Leones*' so-called '*Sala de Justicia*' in the Alhambra.⁴⁴

More than well known, however, the romance was repeatedly deemed appropriate to the articulation of delicate points of cultural negotiation along both sides of Iberia's Christian-Muslim frontiers, both real and imaginary. And *BR*'s creation, during the final decades of the 12th century or the first ones of

the 13th, coincides exactly with one of the earliest historical moments at which Provençal troubadours, certainly familiar with Floire and Blanchefleur's story, were present at Castilian courts as the favoured protégés of Queen Leonor of Castile, herself the descendant of a venerable line of patrons of courtly literature in the *langue d'oc*. Indeed, Ibn Sa'īd al-Maghribī records several instances of Jewish poets who praised, first, Ibn Mardaniš (known to the Castilians as 'El Rey Lobo,' or 'the Wolf King') or Ibn Ḥamūshko, and then 'Adhfūnīsh' (i.e., Alfonso VIII of Castile, the two Andalusī anti-Almohads' ally of convenience) in Arabic, clearly indicating the frequency of literary and cultural cross-fertilization between the two contexts.⁴⁵ In fact, the rather curious character of *BR*'s otherwise nameless *Sayyida* is quite possibly to be explained in terms of this relationship: though *majlis* literature in Arabic, as well as *ahl al-*ishq** narratives (among these latter, certain versions of the initial encounter of Majnūn with his Laylā⁴⁶), are filled with courtly women presiding over *majālis* and requesting drinks to be served and songs to be sung, all of these ladies have names. It is therefore quite tempting (and, I believe, entirely correct) to envision the *Sayyida* as an embodiment of *BR*'s authors' reaction to the European concept of the troubadour poets' *Dama*, Lady, or *midons*.

Just as courtly identities and tropes couched political discourse at courts both royal and noble all over Europe throughout the 12th, 13th and 14th centuries, so they had provided the language into which to translate discussions of political and dynastic loyalty at the courts of the Andalusī *fitna* sovereigns and the *mulūk al-tawā'if* during the 11th—indeed, courtly love's first appearances on the European political stage, if we include Andalusī courts, as we should, among this category, are traceable to this context.⁴⁷

Historians commonly refer to the period surrounding the dissolution of the Almohad empire as a 'second *taifa* period,' in view of the political decentralization which characterized it. Legitimacy and royal or courtly identity were now particularly open to negotiation, both within the Arabic-speaking context most immediate to the power spheres of

⁴⁰ See Robinson 2006a, pp. 171–212.

⁴¹ See Robinson 2005.

⁴² Again, this point is argued in full in Robinson 2006a.

⁴³ Grieve 1997.

⁴⁴ To appear among a collection of papers on the Alhambra ceilings proceeding from a session at the Kalamazoo International Conference, May, 2005, to be edited as a special volume of *Medieval Encounters* by Simone Pinet and Cynthia Robinson.

⁴⁵ For more extensive discussion of this moment and bibliography, see Robinson 2003.

⁴⁶ Robinson 2006a, pp. 180–181.

⁴⁷ See Robinson 2001, Part I.

such rulers as Ibn Mardanih and Ibn Ḥamūshko, and between heads of kingdoms and political entities of differing religious confessions. *BR*, in essence, represents what is perhaps the earliest extant codification of an Andalusī Arabic courtly tradition, one which is fully conscious of its relationship, on the one hand, to the venerable tradition of *ahl al-ʿishq* narratives proceeding from the mythic east and, on the other, of the more localized traditions of the royal *majlis*, the panegyric *ghazal* and *khamrīya*, as well as treatises on courtly etiquette such as Ibn Ḥazm's *Tawq al-Hamāma*. This tradition is quite possibly one which the story's authors intended to be exhibited (literally, in light of the manuscript's costly and extensive program of images) alongside the other courtly models being performed, sung and recounted at the courts of Castile. *BR*'s creators clearly appreciated and esteemed the traditions of Romance courtliness exhibited by their Christian allies—otherwise, they would not have appropriated the generic framework of the *roman idyllique*. The conception of a programme of images specifically to accompany this particular narrative is further indication of the importance acquired in the politically complex context of al-Andalus' 'second *taifa* period' by a tradition of courtly one-upmanship, one which, stretching forward into Castilian '*maurofilia*' literature of the 16th century, would remain central to Muslim-Christian political and cultural negotiations well beyond the fall of Granada.

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THE SCHEFER ḤARĪRĪ: A STUDY IN ISLAMIC FRONTISPIECE DESIGN

Robert Hillenbrand

It has long been generally recognised that the copy of the *Maqāmāt* of al-Ḥarīrī in the Bibliothèque Nationale at Paris, dated 634 (1237)—BN ms. arabe 5847—is by far the most distinguished of the many illustrated versions of that text (Fig. 1).¹ It holds that position by virtue of its peerless assemblage of 99 pictures and its fine calligraphy, all the work of a single artist, Yaḥyā b. Maḥmūd b. al-Wāsiṭī. Given the *embarras de richesse* provided by the illustrations to the text, it is perhaps not surprising that the frontispiece of the manuscript should have been somewhat neglected; but it richly repays detailed scrutiny in its own right. It draws discriminately on a wide range of visual sources and wields their motifs with an enviable certainty of touch.

The aim of the present paper is to interpret this unusual pair of pictures and at the same time to analyze some of the conventions that dictated the form of images of authority in the medieval Islamic world. To do this it will be necessary to study first the contemporary conventions which governed how the opening pages of an illustrated manuscript should be treated; next, the general layout of this particular double page, both as a whole and, more specifically, as regards the panels enclosing the principal figures;

then the compositional principles followed in each of the two main pictures; and finally, the often minute, but nevertheless diagnostic, differences between the two images of authority. It is these differences that will provide evidence to justify the interpretation of their meaning which is proposed below.

What follows is essentially a formal analysis, for that promises the best chance of solving the problem of interpretation posed by the two main figures; besides, the fact that scarcely any detailed analyses of any 13th-century Islamic frontispieces have been published to date² suggests that it is high time that such an attempt was made.

CONTEMPORARY CONVENTIONS OF FRONTISPIECE DESIGN IN THE CONTEXT OF THE SCHEFER ḤARĪRĪ

In a manuscript so variously original it is small wonder that the opening pages should infuse time-honoured

¹ The manuscript is now available in facsimile form: *Maqāmāt al-Ḥarīrī* 2004.

² The most comprehensive attempts in this direction were those of Richard Ettinghausen in his classic *Arab Painting*, for which see Ettinghausen 1962, pp. 62–71, 74–8, 92, 98–103; for a discussion of the Schefer Ḥarīrī frontispiece, see pp. 111 and 114–5. See also the analyses of individual frontispieces in Hoffman 1982, pp. 254–305; she deals with the Schefer Ḥarīrī on pp. 193 and 259–60. Cf. also Hoffman 1993, p. 8. The fullest published account of the Schefer Ḥarīrī frontispiece is that of Grabar 1984, pp. 21–3.

conventions with new life. The volume opens in an acceptably traditional manner; fol. 1 recto is largely blank and its sole decoration is a large *tabula ansata*³ whose central panel bears the words *al-maqāmāt al-ḥarīriyya* in cursive script (Fig. 2). The geometrical interlace and scrolling arabesques of the whole composition, as well as the endpieces of the *tabula ansata* and the colour scheme of blue, gold and white, are entirely in the spirit of *sūra* headings in contemporary Qurʾān illumination⁴ and show the artist's mastery of that idiom, though these echoes of the sacred book occur in an emphatically non-sacred context. The principal visual impression which this page makes is one of emptiness. Yet contemporary and earlier Qurʾāns show that ample precedent existed for an opening page⁵ (or pages)⁶ totally devoted to illumination. Perhaps the artist was understandably chary of adopting this latter procedure here, as it might have brought his manuscript inappropriately close to a style which carried unmistakable religious associations. This relative emptiness does, however, have one positive advantage: it acts as a curtain-raiser for the following two pages. Its plainness provides an excellent foil for their prodigal wealth of design and ornament. Turning the page for the first time from the Spartan austerity of folio 1 recto to the visual plenitude of folios 1 verso and 2 recto, where all the space is painted, most readers might well experience a start of surprise. Most significant of all, the decision to use the opening leaf of the book as a title page, and not as a frontispiece, presented the artist with the possibility of creating a frontispiece which spread over two pages instead of being confined to one.⁷ The challenge was, of course, self-imposed.

Yet it is important to be aware that, so far as the extant evidence suggests, no ready-made iconography for a double frontispiece existed in the Islamic world.⁸

In later manuscripts, double frontispieces feature spacious alfresco settings in which the delights of princely life unfold in leisurely fashion. Attention shifts from the prince's image itself⁹ to an imaginative evocation of his entire lifestyle. Ample space is a prerequisite for this somewhat freewheeling approach to royal iconography. In the body of the Schefer Ḥarīrī, al-Wāsiṭī does occasionally show his awareness of treating a double-page spread as a unit, with the action spilling over from one page to the other in as natural a way as he can devise. But these ideas,¹⁰ which sometimes reveal an engaging wit, are not developed very far. In his double frontispiece they are present only as a dim premonition. Moreover, his was not, as it turned out, the way of the future. Perhaps the extreme formality and sense of hierarchy which stamps his images of authority did not recommend themselves to later painters because his approach excluded so much of the normal contemporary repertoire of royal iconography. Within its self-imposed limits it was indeed an impressive achievement—but also in some sense a dead end.

Al-Wāsiṭī, then, seems to have taken an unusual though not unprecedented step in giving his book a double frontispiece. It is worth remembering that he did not have to use both pages for frontispiece themes. He could, for example, have painted a traditional frontispiece on folio 1 recto; or at folio 1 verso, and then begun the text proper on the opposite page.

³ Herzfeld 1916, 189–99.

⁴ See James 1992, pp. 43 and 57; Parham 2001, pp. 62–3.

⁵ James 1992, pp. 46–7, 53 and 61.

⁶ James 1992, p. 25; cf. too the Qurʾān of Ibn al-Bawwāb in the Chester Beatty Library (Rice 1955, pl. III).

⁷ Naturally, it was always open to the designer of a book to place the frontispiece further into the volume, and thereby to secure a double-page spread, and this was indeed done. One must also reckon with the possibility that the present state of the opening pages of a given codex does not reflect its original appearance; often enough, it is precisely the opening pages that have vanished and that have been replaced with later leaves—see, for example, a couple of manuscripts of al-Šūfī's *Kitāb ṣuwar al-kawākib*: TKS 4293

of 525 (1130–1) (Holter 1937, p. 3) and a copy dated 519 (1125) (Sotheby's 1988, p. 35).

⁸ Hence the very different—and frankly experimental—solutions to this challenge that artists devised at this period, as shown by the three manuscripts with double frontispieces that predate the Schefer Ḥarīrī: the Istanbul Dioscorides (Ettinghausen 1962, pp. 68–9), the Paris *Kitāb al-Diryāq* (n. 16 below) and the Tehran al-Šūfī (Parham 2001, pp. 268–9; see fig. 3).

⁹ See Bernus-Taylor *et al.* 1983.

¹⁰ For example in the preaching scene at Rayy in *maqāma* 21 (fols. 58v–59r), where the *khaṭīb*'s voice is projected as it were across the gutter of the manuscript to the more distant section of his audience (for a colour illustration, see Hillenbrand 1999, pl. 2 and unnumbered plate at end of the section of colour plates; cf. Grabar 1984, pp. 64–5).

Perhaps it was precisely because this visual juxtaposition of frontispiece and text page was regarded as undesirable—since it obviously detracted from the pre-eminence of the frontispiece image—that such images were normally placed on the opening folio, though occasionally they were located as late as folio 4 recto. The reason why al-Wāsiṭ chose to break with convention in this matter will probably never be known. His inclusion of an image of power certainly suggests at first sight that the manuscript was produced at the behest of a specific patron, as indeed common sense would indicate. Yet the colophon, full as it is, makes no mention of a patron. The fact that al-Wāsiṭ copied the manuscript as well as illustrating it, and seems thus to have been an independent operator rather than a member of a production team, speaks for his originality and should prepare one for distinctly personal solutions to problems of layout and iconography.

If it is strange enough for the manuscript to have a double frontispiece, it is still stranger—and no Islamic parallels come to mind at this period—for that frontispiece to comprise two images of authority and not one. If one figure were of lesser authority than the other, it would have been open to the artist to place it on a succeeding page. As will shortly appear, the figure on the viewer's right is probably a ruler and the figure on the left is of lesser importance. Yet placed as it is opposite an image of power, it competes with that image and indeed cannot help doing so. The difference in their faces indicates clearly enough that these are two different people, not one and the same person seen in different guises or activities. The artist has therefore created a serious problem for himself, being forced to reconcile the irreconcilable. Other Arab frontispieces are either not double or, if they are, take good care to ensure that the design of the subordinate (usually left-hand) page does not lure the eye away from the pre-eminent figure of authority on the opposite page. Al-Wāsiṭ's 'double' frontispiece seems essentially to comprise two adjoining single frontispieces. Yet, as we shall see, there is rather more to it than that.

A brief survey of Islamic illustrated manuscripts produced before 1300 is enough to reveal that figural frontispieces were by no means the norm. Among the eight 13th-century illustrated *Maqāmāt* manuscripts, for example, only one, apart from the 1237 example,

perhaps had a frontispiece.¹¹ Most of the 13th-century illustrated texts existing in one or two copies have no frontispieces at all. Among the more popular books, or those which have been preserved in several copies, two texts are of special interest in this connection: the *Kūtāb al-Aghānī* and the *De Materia Medica* of Dioscorides in its Arabic version. The former is known in an incomplete luxury edition prepared for Badr al-Dīn Lu'lu' of which six volumes, each with a one-leaf royal frontispiece and no other illustrations, have survived.¹² The Dioscorides text exists in eleven illustrated copies predating 1300 of which five have frontispieces.¹³ None of these are royal, but one is a double frontispiece, with the seated author on the right and two students on the left presenting him with a book (Fig. 4).

The total of illustrated Islamic manuscripts and detached leaves datable before 1300 was computed over sixty years ago at 49,¹⁴ and on the basis of that published evidence it seems that only 11 had frontispieces. Five of these are to be found in Dioscorides manuscripts and two at most in *Maqāmāt* ones. Some of these frontispieces are too damaged to be interpreted in detail. Others may have been double but, if so, only one leaf has survived. In this list, only six are indisputably double frontispieces.¹⁵ Clearly these statistics are not entirely satisfactory, since other illustrated manuscripts have come to light

¹¹ This is in Paris 6094, of which only traces of a frame—which could equally well have held a dedicatory inscription or a title—remain; see Grabar 1984, pp. 8–9.

¹² The best general discussion of these images is still that of Rice 1953. See also Johnson 1975, pp. 39–128.

¹³ See Grube 1959, pp. 163–80.

¹⁴ The sources for this figure are Holter 1937, supplemented by Buchthal, Kurz and Ettinghausen 1940.

¹⁵ These are al-Mubashshir's *Mukhlāt al-Ḥikam wa Maḥāsīn al-Kalīm* (Istanbul, TKS Ahmet III, 3206), the Dioscorides of 626/1229 (Istanbul, TKS Ahmet III, 2127), the Schefer *Maqāmāt*, the *Rasā'il Ikhwān al-Safā'* (Istanbul, Library of the Süleymaniye Mosque, Esad Efendi 3638), the *Tārīkh-i Jahān Gushā* (Paris, Bibliothèque Nationale, MSS or., Suppl. Persan 205) and a textless royal frontispiece (Istanbul, TKS Hazine 2152, fols. 60v–61v; in the substantial bibliography on this frontispiece, three items stand out for their careful and original scholarship: Schulz 1914, I, pp. 78–81; Esin 1963, pp. 143–61; and Fitzherbert 2001, I, pp. 35–52). One might add to these six a further two manuscripts that came to light after 1940: the Paris *Kūtāb al-Dīryāq* (see next note) and the Tehran al-Ṣūfī.

since 1940,¹⁶ but they do serve to give an order of magnitude, and to underline the relative rarity of the particular frontispiece under discussion. The contemporary context suggests that frontispieces imply royal patrons, or at any rate figures of secular authority (Fig. 5), for the books in question; their mere presence in a manuscript conferred on it a certain *éclat*. Finally, the context of the 1237 *Ḥarīrī* suggests that no norm had yet developed for frontispieces, a point made with particular forcefulness by the totally different frontispieces of the Vienna *Kūtāb al-Diryāq* (Fig. 6) and its counterpart in Paris. So much, then, for contemporary practice in the matter of figural frontispieces.

THE LAYOUT OF THE SCHEFER ḤARĪRĪ FRONTISPIECE AS A WHOLE

The next topic for analysis is the aspect presented by the double page as a whole. As the introduction to the whole book and the reader's first exposure to its figural style, its importance is critical. The painter lavishes on these two pages all his powers as a figural painter and as a designer of ornament. The richness of effect thus achieved is breathtaking. A welter of ornament bids fair to engulf the pictures themselves. Yet already here, at the very opening of the book, the painter serves notice of his readiness to make creative use of influences from quite disparate media and artistic traditions. The upper and lower margins of the two pages are ornamented at their outer edge by a series of tessellated forms which recall the outermost surrounds of Qur'ān leaves of this period and earlier,¹⁷ and also 13th-century metalwork,¹⁸ though they also bring to mind the fringes of rugs. Whichever of these ideas is at work, there can be no doubt that the associations of this motif were with costly artefacts.

It is even possible that these two pages represent an attempt to combine two quite separate traditions of frontispiece design. One, obviously enough, is the princely image. The other is the full-page ornamental frontispiece, a concept already ancient in the 13th century, and here perhaps even further enriched by a visual association with a fringed carpet with many borders.

Within the outer tessellated fringe each of the two pictures is enclosed by a thick band of intersecting vegetal scrolls. Inside these is a menagerie of animals disporting themselves—rabbits, hares, felines, dogs and birds of prey. The ultimate source of this motif is of course the inhabited scroll of late antiquity. It is a theme which enjoyed wide popularity in various Islamic media such as textiles and ceramics, and can also be found in neighbouring Christian contexts, as in Crusader art, where the outstanding examples are the ivory covers of the Psalter of Queen Melisende, datable c. 1135,¹⁹ and the frontispiece of a copy of the *Histoire Universelle* produced in Acre c. 1285.²⁰ Here in the Schefer *Ḥarīrī* it is firmly relegated to secondary status, confined as it is to a border surrounding the figural compositions that are the main focus of interest. The continuous inhabited scroll is one of the most popular border designs in medieval Islamic metalwork.²¹ A favoured motif here is a key image surrounded by a field of dense ornament which, being greater in area, engulfs it, but, being lesser in significance, gives way to it visually.²² The obvious visual purpose of the border is to frame the two central panels and not to compete with them. Hence its density, its repetitive quality and its predominantly gold tonality (another metalwork effect), which tends to make an immediate visual impact as a mass of undifferentiated colour rather than to emphasise the individual features of its design.

Since each of the two pages is laid out in the same way, the effect is to create a thick quadruple border between the two central images. Within the shimmering backcloth thus created, the two figural

¹⁶ For example, the Paris *Kūtāb al-Diryāq* (Farès 1953); the Tehran al-Šūfi (n. 8 above); and a *Kalīla wa Dimna* of c. 1260–85 in Istanbul (TKS, H.363; see O'Kane 2003, pp. 49 and 228). Note that the Paris manuscript (like the *Mukhtār al-Hikam*), essentially repeats two virtually identical scenes on facing pages, rather in the manner of Qur'ānic frontispieces. The *Mukhtār al-Hikam*, like several Qur'āns (James 1992, p. 27 and Rice 1955, pl. IV) also has a double finispiece whose two halves are virtually identical.

¹⁷ James 1992, pp. 53–5.

¹⁸ Baer 1983, figs. 75, 91 and 199; Ward 1993, pp. 75 and 81.

¹⁹ Buchthal 1957, especially pp. 1–14; Folda 1995, pp. 137–59 (for the ivory covers, see especially pp. 152–3, pls. 6, 10a–b, and pp. 157–8); and Hoffman, *Emergence*, 217–20.

²⁰ Buchthal, *op. cit.*, pp. 80–2 and pl. 83; Folda 1976, pp. 77–80; Hoffman 1982, pp. 213–6; Folda 2005.

²¹ Baer 1983, figs. 22, 55, 59, 61, 74, 126–8, 151, 155–6; Ward 1993, pp. 70, 87 and 89.

²² Marchal *et al.* 1971, pp. 103–4 and pls. 150–1.

panels are encased—again, metalwork provides the natural analogy—like jewels in a rich setting. It is worth insisting on this point, since other contemporary frontispieces make far less play of ornament, preferring to devote to the figural composition itself the extra space thus made available. It should be noted, too, that the impact of the surrounding ornament is magnified by the multiple blue and gold borders which set off the inhabited scroll design on either side. These contrive to distance still further the separate, enclosed world of the central panels and thus to enhance the authority of the images depicted in them. By that account, then, the decision to devote most of the double frontispiece to ornament should be interpreted less as evidence of a preference for ornament above figural images and more as a characteristically original attempt to make ornament serve new purposes.

Clearly there is a spatial element in all this; and indeed, a sensitivity to nuances of space can be detected throughout the pictures of this manuscript. Certainly the notorious Islamic *horror vacui* is at work in the border panels, and might be thought to exclude the possibility of any spatial subtleties; but this density itself highlights the comparatively freer space within the panels. Thus a deliberate contrast is being set up between the borders and the panel itself. Both are needed if the effect—to concentrate the viewer's gaze on the main figures—is to work. These details apart, the cumulative impact of the borders—frame within frame within frame—is as if the figural images were being studied from the wrong end of a telescope. The eye is drawn ineluctably to the centre of each page.

This use of successively smaller frames like Chinese boxes is essentially a spatial device, for in the end they create a three-dimensional impression for the central images. It may be no more than an illusion, a trick of perception rather than of perspective; but its success can scarcely be denied. Further devices within the panels themselves, to be discussed in a moment, foster this illusion.

Given so subtle a deployment of illusionistic techniques, it is not surprising that the diminutive size of the central panels is not immediately noticeable. This is all the more remarkable since the figural panel takes up less than 23% of each page in its current state. With so little space at his disposal, the artist had to make every detail tell; and, that decision made,

he could scarcely allow himself the luxury of, say, an expansive account of court life.

In sum, then, a whole battery of devices is employed to focus attention on the central panels, and all work in concert. Such deliberation presages an even greater concentration of meaning in the images themselves, and excludes the presence of casual or random detail. Even in a richly illustrated manuscript such as this, after all, it was still logical to expect the attention of the patron to home in on the frontispiece which showed him enthroned. The nature of the right-hand page gives us a clear enough idea of what kind of patron the artist had in mind.

THE LAYOUT OF THE SCHEFER ḤARĪRĪ FRONTISPIECE: THE FIGURAL PANELS

From the page as a whole one may turn to the figural images that dominate it. The compositional layout here illustrates the selfsame ability of the artist, already noted elsewhere in the picture, to ring the changes on very familiar themes. These changes are subtle, and individually they are no doubt minor; but collectively and cumulatively they invigorate an enfeebled iconographic theme. At the same time, the restricted compass within which these changes are effected is instructive. Whether it betrays the artist's personal reluctance to embark on a thorough-going reworking of the frontispiece convention or rather reflects an exhausted tradition which could not accommodate any more radical change than this remains an open question. Beyond any doubt, though, it is the work of a man who understood intimately the tradition within which he was working and yet had not allowed familiarity to dull the edge of his perceptions. Hence his ability to manipulate familiar ideas in unfamiliar ways, and to make every detail tell. This was a hard act to follow. In a sense it is the intellectual density of this frontispiece that most clearly attests its maturity and that makes it natural that the more innovative artists of the next two generations should develop the frontispiece along appreciably different lines. The Ḥarīrī frontispiece, then, may claim to be a coda to an old tradition rather than a point of departure for something new.

Broadly speaking, the layout of the figural panels uses a straightforward three-tier system. These tiers

may conveniently be considered in turn. Each of the lower tiers contains standing people, apparently all men, crammed close together. An obvious mirror symmetry or duplication that operates here. This symmetry is evident not only in the almost exact consonance of numbers from one panel to the other, but also in the poses of the men and the order in which they occur. In each panel the two central figures among the 'lower orders'—that cliché has a compositional justification here—have their backs to the viewer. The remaining figures in this tier are all depicted in three-quarter view. The turned backs represent one of the very earliest uses of the *repoussoir* device in Islamic painting. Its purpose here is to reinforce the three-dimensional effect already secured by the multiple frames. Indeed, that effect is so accentuated as to draw the viewer into the picture. The three figures as it were climbing up into the middle tier are conceived in the same spirit. Nevertheless, it must be conceded that the full spatial potential of this group of figures is not realised. In other artistic traditions such a grouping is often turned into a semi-circle by means of a whole gamut of poses.²³ These extend, by successive nuances of three-quarter view and profile, all the way from total frontality to a back view.

As befits its greater importance, the middle level is physically larger than the tier below, but is not utterly divorced from it. The trio of figures encroaching into the middle tier obviously forms a link between the lower and middle levels. Yet their significance extends beyond this. Indeed, it is central to the entire interpretation of the central panels. The left-hand image makes sense only if the slightly turned head of the man with the turban has some figures nearby with which to make contact. Once this is accepted, the emptiness of the space to his left is self-explanatory: the presence of figures there would be counter-productive. Hence the blue triangle of empty space in that very place. The principle of mirror symmetry dictates that the same triangle should occur to the right of the enthroned ruler. This has a further consequence—that the visual function of these two blue triangles, which draw the eye because of their

concentrated mass of colour, is to integrate the two panels and to affirm that they occupy the same continuous space.

Certain basic facts about the layout of this central tier stand out. They may seem painfully obvious, but that should be no reflection on their importance; rather the contrary. For the sake of convenience these elements will be considered in the context of the image of the *amīr*; the image opposite shares the same characteristics. The differences between the two images are another matter altogether and will be analysed in detail in the next section of this paper.

What, then, are these basic compositional features?²⁴ To begin with, the *amīr* is seated. Everyone else stands. It is a simple detail, but one that establishes his dominance in unmistakable fashion. Body language of this kind has lost virtually none of its significance in our own century and society; indeed, it transcends most barriers of time and culture. The prominence of the ruler is further stressed by the fact that he sits on a bolster with an elaborate kind of throne behind it.²⁵ More significantly, he is allotted ample space whereas the people below him are crammed uncomfortably close together. This juxtaposition of ample and confined space has a long history in the royal iconography of the Middle East, finding expressions as varied as Sasanian bas-reliefs²⁶ and al-Manṣūr's Baghdad. Whatever the local idiom, the basic message remains unchanged: it is a privilege, indeed a sign, of the ruler to enjoy the *Lebensraum* denied to his subjects.

The features noted so far by no means exhaust the examples of an iconographic shorthand of power in this image. The main figure, for example, is central and this makes him the natural focus of the composition. The greatly exaggerated size of the ruler, which is of course intended to enhance his importance, is so familiar a characteristic of royal iconography in Islamic, Byzantine, classical and ancient Near Eastern art as to call for no further comment. Frontality is an equally hackneyed signifier in such contexts. The

²³ Cf. too the St Petersburg *Maqāmāt*: Akimushkin *et al.* 1994, pp. 117–27.

²⁴ It is instructive to note how many of them recur in the *Aghānī* images.

²⁵ There is nothing particularly royal about this feature; it recurs frequently in everyday scenes in this very manuscript. Here the bolster (and turban?) bears a *ṭirāz* inscription.

²⁶ Herrmann 1977, pp. 87–96.

figure opposite, though not entirely frontal, is sufficiently close to that pose to partake of some of its advantages. Finally, in both cases the central figure is set physically above everyone else, and thus symbolically beyond the ken of the common man.

In sum, then, the figure of authority is exalted by a battery of visual devices using a terse, direct idiom which even today has lost little of its power. While the differences between the two main figures are of crucial relevance to a correct interpretation of their meaning, it must be remembered that they are minor. They should not deflect attention from the *raison d'être* of these figural panels, which is to exalt the two images of authority by all the means at the artist's disposal—except, curiously enough, inscriptions. Despite the crowded nature of the two main pictures, room could still have been found for identifying *ḥirāz* bands or an inscribed panel between the winged figures or below the audience. Yet it would be mistaken to read very much into the absence of inscriptions, for a brief glance at other contemporary frontispieces is enough to reveal that inscriptions were simply an optional extra in such compositions (cf. Fig. A).²⁷

There remains the upper tier of the composition. A degree of colour symbolism is brought to bear in this part of the picture: above the head of each figure is a patch of blue.²⁸ Given the visual connection with the empty triangle on one side of each figure, the obvious conclusion is that this blue area is intended to signify the sky. This segment of sky is enclosed within a decorative arch profile. Here again an ancient tradition is at work: the idea of setting the figure of authority, usually divine or royal, within an arcuated niche.²⁹ The theme is protean in its expressions—the cult statue in a pagan temple, the bishop in his apse, the ruler in a throne recess in his palace. This motif had established itself firmly in the Islamic world in the course of the first century AH,³⁰ and had already entered the repertoire of Islamic frontispiece design (Fig. 7).

The red area above highlights this arch and may be intended to represent, admittedly only in symbolic fashion, a curtain or canopy, as is suggested by the presence of a winged figure in each spandrel. In some roughly contemporary frontispieces such winged figures are depicted actually holding a canopy or drawing a curtain aside, and it is therefore possible that this was the immediate association conjured up by such figures at this time. The location of the winged figures—be they genii, victories, angels or yet other beings—above the notional sky is clear enough indication that they inhabit another, heavenly world.

It may be of interest to note that in both panels the two upper corners of the throne on which the main figure sits project into this uppermost space. Perhaps this detail is to be understood purely at the compositional level, as a linking device between tiers. Nevertheless, it could be intended in a symbolic sense too and would thus express the relationship between the figure of authority and the heavenly realm.

COMPOSITIONAL PRINCIPLES: GENERAL CONSIDERATIONS

So much, then, for the treatment of each of the three levels of the figural panels. What of their organisation as a whole? Two major compositional principles may be observed at work here. One is a pronounced emphasis on axiality. The centrality of the main figure is underlined by features both above and below him. This creates a kind of spinal column that controls the layout of the entire picture. Above the ruler the chord of the picture is marked by the arch and by the empty space flanked (and therefore stressed) by the two winged figures; below him, the same caesura drives down between the two figures with their backs turned. Even the creatures in the margin are so disposed as to accentuate this imaginary line bisecting the entire composition. It is of course the central figure who gathers up into himself, and becomes the focus of, this axial emphasis.

The second compositional principle is the division into tiers (cf. Fig. 8). It seems very likely that the intention behind this device is to mark off separate levels within an overall hierarchy. In that case the higher the image is, the more importance attaches to it.

Like so many other visual devices in these panels, this idea has a long history. That history may most conveniently be taken up at the point when the

²⁷ Brandenburg 1982, pp. 25 (Istanbul Dioscorides) and 209 (Bologna Dioscorides); and Ettinghausen 1962, p. 65 (*Kitāb al-Aghāmī*).

²⁸ Cf. Rice 1953, p. 134.

²⁹ Miles 1952, pp. 159, 160 [fig. 6], 161–4.

³⁰ Miles 1952, pp. 162–4; Fehérvári 1972, p. 241. In architecture obvious examples are to be found at Qusayr 'Amra and at Mshatta.

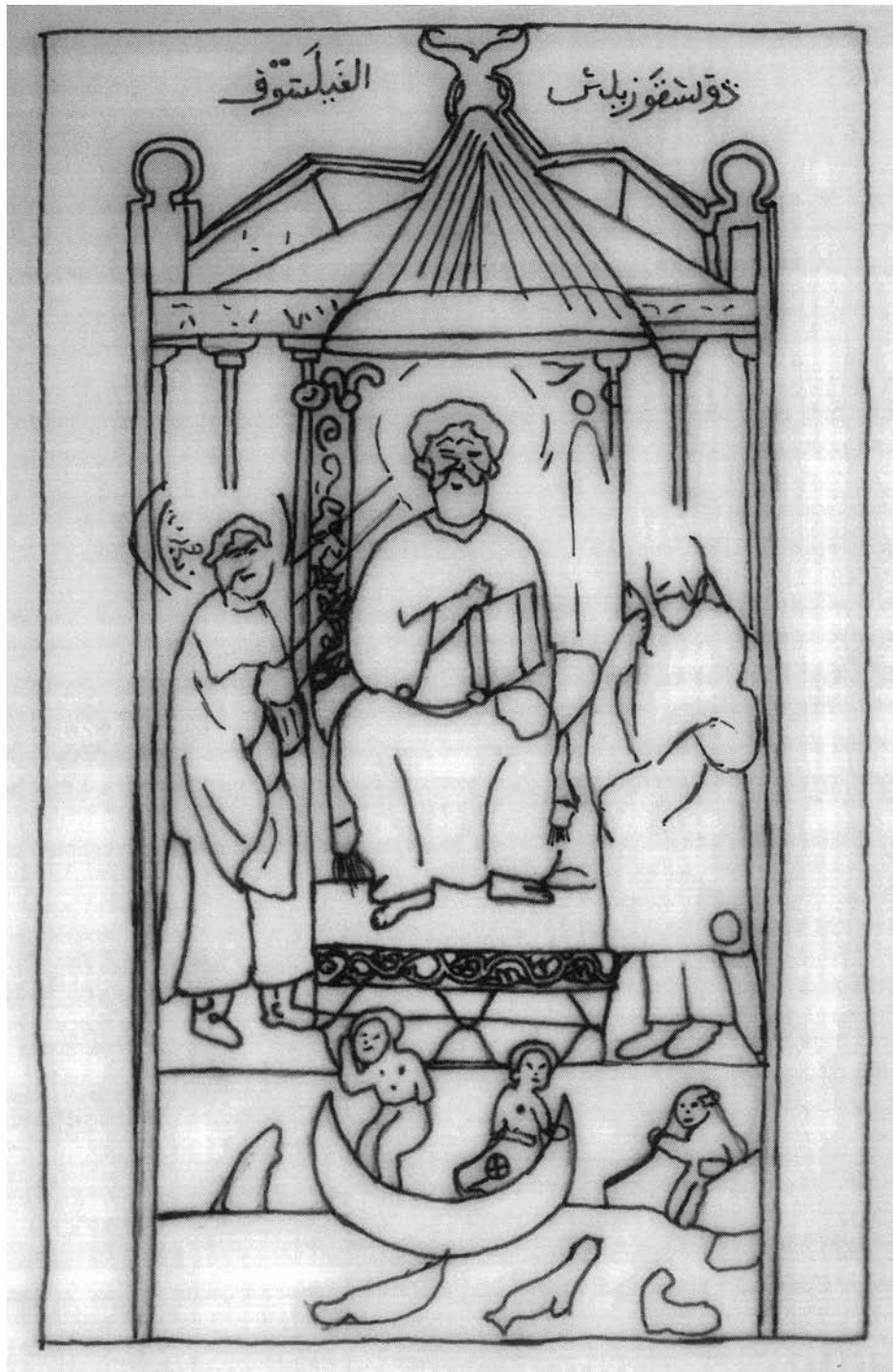


Fig. A. Frontispiece. Dioscorides, *Hiyūlā 'ilāj al-ṭibb*, Baghdad or North Jazīra, dated 621 (1224). Istanbul, Süleymaniye Library, No. 3704, fol. 1v.

Byzantine consular diptych was reaching its apogee.³¹ In these objects, which were of course also symbols of power, the significance of the threefold lateral division was driven home by the content of each panel: servants or tribute-bearers in the predella, the figure of authority in the centre and winged figures in the upper panel.³² It will be noted that the Schefer Ḥarīrī closely follows this layout, even maintaining the traditional distinction between small oblong panels above and below and a larger rectangle at the centre. In time this image was Christianised and then employed in a distinctively new way: as a book cover. The Murano and Echmiadzin Gospels provide typical examples of this innovation.³³ It seems a persuasively simple transition from external to internal decoration, from such a carved book cover to a painted frontispiece of identical theme and layout just inside the book cover. Ample other evidence exists to prove firstly that the craftsmen concerned with the arts of the Islamic book were well abreast of the practices followed by their Byzantine counterparts,³⁴ and secondly that Islamic artists delighted in transposing Byzantine ideas into new media or locations. Paradoxically, it was the Islamic world that seems to have kept alive the smoothly constructed, economic and expressive iconography of the consular diptych at a time when it had fallen out of fashion in its parent civilisation.

The best evidence for this surprising survival is in the Vienna *Kitāb al-Diryāq*. Here, as in the consular diptych, the whole of the surface is imbued with iconographic meaning, whereas in the Schefer Ḥarīrī the key motifs occupy less than a quarter of the page; and the picture surface is subdivided by actual lines into five unequal compartments, exactly on the analogy of a late antique model like the Athanasius diptych.³⁵

DIAGNOSTIC DISTINCTIONS BETWEEN THE PRINCIPAL FIGURES AND THEIR ENVIRONMENTS

It is now time to note the key differences between the two panels. An awareness of the motivation behind these distinctions will enable each picture to yield its full quota of meaning. The tally of such differences is surprisingly long, which is itself instructive in that it reveals how much calculation was required to build up an effective image of authority. Almost every detail counts towards the cumulative effect.

The obvious place to begin is of course the figures themselves. The ruler is larger than the man in the turban. By the accepted conventions of the day, that made him more important. His pose takes up a good deal more space than that of the turbaned man, and the size of his throne expands to accommodate this. By a kind of domino effect, the people standing beside the ruler's throne are much more tightly packed than those in the comparable space opposite. His face is fully frontal, whereas his counterpart is shown in three-quarter view. Such frontality was the norm for royal and religious images in Near Eastern art long before the coming of Islam.³⁶ It had therefore come to connote an image of authority. The three-quarter view, by contrast, carried associations of narrative and speech. It made contact with others in the picture space, whereas the frontal view directly addressed the viewer.³⁷

Other details of the body language reinforce this distinction. Both men are seated cross-legged *à la turque*, but there the resemblance ends. The man wearing a turban sits comfortably relaxed, if not slumped, his right hand raised in an age-old gesture denoting speech³⁸ and his left arm resting casually on his thigh. The pose of the ruler tells a very different story. His carriage is erect, alert, commanding. He leans forward slightly, his right hand crooked at his chest in a gesture which suggests that he is holding a goblet, as was indeed standard practice in comparable Islamic images of authority.³⁹ His left arm is clamped

³¹ Delbrueck 1929, pls. 9–25, 32, 43 and 48; Capps 1927.

³² Delbrueck 1929, pls. 17–18, 20–1.

³³ For the Murano diptych, see Weitzmann 1979, p. 403; for the Echmiadzin diptych, see Beckwith 1970, pl. 116; but it is worth noting that this is only half the complete diptych, whose two parts complement each other in format and subject matter (Grabar 1968, III, pl. 146c).

³⁴ See the general discussion of this topic in Ettinghausen 1962, pp. 67–80.

³⁵ Weitzmann 1979, p. 34.

³⁶ Hopkins 1936; cf. the discussion, with further bibliography, in Perkins 1973, pp. 123–4.

³⁷ For the theological background, see Demus 1976, pp. 7–9.

³⁸ King 1960, pp. 14–16.

³⁹ Marchal *et al.* 1971, cover.

aggressively onto his left thigh, thereby accentuating the already marked dominance of his pose.

The ruler is resplendent in scarlet and gold; indeed, armbands, lapels, frogging and piping are all in gold. Touches of gold for wrists and neck, and gold armbands, suffice for the figure opposite. He wears a powder-blue robe and thus makes a much more modest impression. He wears a turban of a type standard for private citizens, and indeed encountered continually in the later illustrations of this very book. The ruler, by contrast, sports a black fur hat of imposing proportions, very much in the style of a modern busby. Though not identical to the fur hats worn by the *amūrs* depicted in the *Aghānī* frontispieces and the Vienna *Kūlāb al-Diryāq*, it is recognizably of the same family. Whether this kind of hat (spectacularly unsuited for the climate of Baghdad) was a distinctively Turkish emblem of authority, or whether on the contrary it derived from Abbasid prototypes, is unclear.⁴⁰ The golden badge at its centre bears a design related to the third style of Samarran stucco.

Spatial values are again pressed into service in depicting the immediate environment of the principal figures. While the man in the turban floats comfortably above the heads of his audience, with the bolster on which he sits acting as a kind of buffer between the two tiers, and thus giving the audience more room, the ruler squats directly on the heads and haloes of those beneath. Visually speaking, they carry him—the ultimate expression of their subordination. The idea itself is of very ancient lineage in the Near East, but commonly it is the litter or throne on which the ruler sits that is carried by his subjects, rather than the ruler shorn of any other attribute.

Both figures have their heads outlined by a halo. Appropriately enough, the ruler has a much bigger halo, and its importance is further emphasised by the successive concentric lines which define it. Both men have a secondary 'halo' of cloth, a feature which is also found in the slightly earlier *Aghānī* frontispieces. There it is of the same material as the robe worn by the *amūr*, a detail which suggests that its origins may lie in Byzantine and ultimately classical iconography. Such a shawl is a standard attribute of the female personification of Night (*nux*) in numerous Byzan-

tine manuscripts.⁴¹ Even in the Byzantine tradition, however, this meaningful symbol eventually lost its significance and became an empty rhetorical cliché, as can be seen in the shawl hovering redundantly over the maidservant attending the infant Virgin Mary in the apocryphal cycle of the Virgin's life decorating the exonarthex of the Kariye Camii at Istanbul.⁴² How was this motif understood in the Islamic world? Personifications of Graeco-Roman type had no locus there, since the system of ideas that had produced them found no sympathetic echo in Islamic thought. That did not, however, prevent the Islamic artist from devising a new way of using the old idea. In his hands the motif lost its traditional association with a woman and became an element of royal iconography, evoking the idea—ancient in the Near East as in the Graeco-Roman and Byzantine worlds—of the canopy or baldachin over a ruler's head. Islamic court ceremonial adopted the idea so readily that the canopy (*chatr*) became a literary topos for the ruler himself. In the frontispiece of the Vienna *Maqāmāt* of 1334, for example, two flying angels hold a canopy of embroidered cloth over the head of the monarch.⁴³

Let us turn to the architectural setting within which the two main figures are placed: an arch whose profile is shouldered, segmental and re-entrant, with a pronounced ogee character. Such flamboyantly non-structural arch profiles enjoyed a certain vogue in 13th- and 14th-century architecture;⁴⁴ as might be expected, however, they reached their peak of fantasy in the flat manuscript page⁴⁵ rather than in the three dimensions of architecture itself. They are an Islamic revision of a standard late antique theme. They reflect a hierarchy in that the profile of the

⁴¹ As in the 10th-century Paris Psalter (BN Ms grec 139), for example (Grabar 1953, p. 169).

⁴² Underwood 1966, I, pp. 68–9 and II, pl. 105.

⁴³ Ettinghausen 1962, p. 148.

⁴⁴ For examples in real architecture, see Wilber 1955, pp. 69 and 71 (Tabriz); Pope and Ackerman 1938–9, pl. 400 (Varamin); Watson 1975, pl. VIIIa (Masjid-i 'Alī, Quhrud) and, pl. VIIIb (Masjid-i Kalah, Quhrud); Melikian-Chirvani 1984, figs. 3–14, 16–17 (Takht-i Sulayman); Watson 1985, colour pl. N and pls. 111, 113 and 125–6 (Kashan); Pope and Ackerman 1938–9, pl. 395 (the Masjid-i Jāmi', Bastam); and Hillenbrand 1982, pp. 252–3, figs. 95–6 (Bastam tomb tower) and p. 255, fig. 98 (the porch of that tower).

⁴⁵ E.g. in the double frontispiece to the Istanbul copy of the *Rasā'il Ikhwān al-Safā'* (Ettinghausen 1962, pp. 98–9).

⁴⁰ Ibn Jubayr 1952, p. 237; Ibn Jubayr specifies this as 'Turkish dress'.

arch framing the ruler is given four outlines instead of the two which suffice for the picture opposite, and encloses a red tricorne shape (not found in the other image) which works as a symbolic reference to a crown, and thus as a kind of visual pun. The ruler is already marked out by a large halo, an aureole of cloth and a huge busby. No room remains to give him an actual crown; but the composition gives him a symbolic one. Its form has the three peaks characteristic of Saljuq crowns. The arch form, therefore, has been exploited in a double sense: as a reference to the arcuated niche traditionally associated with figures of authority, and as an evocation of an actual crown. No such visual ambiguity operates in the panel opposite.

Even the inner border, with its inhabited scroll, has its part to play, subtly highlighting one page at the expense of the other. Each panel has a slightly different inner border. On the right-hand page the base of the inner border contains six animals neatly divided along the chord of the composition into two groups of three. The same three animals, in the same order and in identical poses, are set in mirror symmetry to each other on either side of the imaginary central line, a line neatly enclosed by two leaves forming an oval and reinforced by a pair of addorsed rabbits. Since the left-hand page has only five animals, a comparable symmetry there is impossible. The looser spacing places them off-axis and sets up a discontinuity *vis-à-vis* the central axis of the main panel.

It should come as no surprise that the corresponding central position within the upper inner border should be equally loaded with meaning. Directly above the ruler is set a heraldic eagle, legs planted well apart, body ramrod-straight and wings outspread—a fully frontal image but for its head turned to the left⁴⁶ and thus making contact with the opposite

page. It is the image of royal power incarnate. In this upper band of the inner border there are five creatures instead of the six in the lower band, but perfect symmetry is again ensured, this time by making the significant creature frontal and central. As with the rabbits below, this centrality is stressed by the closely serried pairs of leaves flanking the centrepiece. This is the only bird in the entire border of this page, and it is placed with appropriate symbolism in the upper band, just as the rabbits, who make their homes underground, are at the symbolically lowest part of the border. Whether some further subtlety is intended here, perhaps exploiting the spiritual significance of certain birds of prey to people of Turkic stock,⁴⁷ is a matter for future research to resolve.

The lordly status of this eagle is thrown into even sharper relief by its counterpart opposite. Here again the design falls short of the symmetry that the observer instinctively expects. True, there is a bird at roughly the centre point of the upper band. Yet it is distinctly—and unnecessarily—off-centre *vis-à-vis* the main panel immediately below it, and this awkward discrepancy extends to the placing of the leaves in the border. This lopsided layout jars with the consummate precision and balance displayed in the inner border of the opposite page. Superficially, this part of the design has enough in common with its opposite number to establish a basic visual equivalence. Again, there is a roughly central bird, it too is the only bird in the whole border, and it too is placed in the upper band.⁴⁸ But one must be content with this perfunctory nod in the direction of parallelism. In spirit the left-hand border is uncertain and imitative, falling decisively short of its counterpart in its essentials. This bird could well be a dove rather than a bird of prey, and is depicted in three-quarter view rather than frontally (the ‘speaking’ rather than the ‘official’ pose), with its head turned in profile to the right and the body inclined rather than erect. These

⁴⁶ One should bear in mind here the inherent difficulty of devising a convincing frontal pose for such a creature; it is noticeable that the various Islamic silks with the theme of the frontal eagle all depict the head (or heads) in profile (see von Falke 1913, I, figs. 144, 157–8, 163, 176, 178, 184–5, 200 and 202). The same is true of Byzantine silks with the eagle theme (von Falke, II, figs. 249, 251 and 253–4). The odd exception, where the frontal mode is attempted (not in a silk but in stone sculpture), is less than a complete success (von Falke, I, fig. 177), and the silk closest to this sculpture in design makes the key alteration of turning the bird’s head (von Falke, I, fig. 178).

⁴⁷ Roux 1984, pp. 43–4. See also Gierlich 1993, pp. 27–9 and 60–1.

⁴⁸ Grabar (1984, pp. 21–2) suggests that these contrasts indicate that fol. 2r was executed by an artist of lesser calibre; but the need to distinguish the two folios may provide sufficient rationale for the differences. This combination of bird and rabbits in the border of a frontispiece recurs in a Fatimid figural image of the 11th to 12th century which prefaced a collection of the poems of Kuthayyir and ‘Azza; see Hoffman 1982, p. 198 and fig. 59.

differences suggest that the birds are a deliberate mirror of the principal figures below them, and that the deference expressed in the lesser bird's pose is a metaphor of the dominant role of the *amīr* in this double frontispiece.

Analysis of minutiae should not be allowed to obscure a fact of central importance: that from the reader's viewpoint the man wearing a turban is placed on the left-hand page while the ruler occupies the right-hand page.⁴⁹ There is no need to dilate here on the deep-seated dichotomy between left and right in Islamic culture,⁵⁰ a dichotomy inherited from the classical and Byzantine world, from which it passed into Western culture. The symbolic resonances of left and right are already exploited with assurance in Umayyad art⁵¹ and had presumably lost none of their evocative power by the 13th century. This is by no means to suggest that the left implied evil;⁵² for in any double frontispiece there must needs be a left-hand page, and indeed any centralised composition must have a left as well as a right side. One must also reckon with the possibility that the choice of the right-hand page for the image of the ruler could well have been reached at a subliminal level. At all events, the right had particular associations of honour, power and privilege which the left lacked. In a composition dictated by notions of mirror symmetry, any obvious and sustained attempt to glorify the right at the expense of the left would be undesirable, for the imbalance thus created would destroy the surface equality between the two images. Nevertheless, the placing of the ruler panel on the right rather than the left is of a piece with the mass of unobtrusive but cumulatively significant details which draw the eye to the right rather than the left.⁵³

⁴⁹ The actual order is reversed in some reproductions.

⁵⁰ See the brief discussion in the *Encyclopaedia of Islam* (2nd ed.), s.v. *yamīn* (IX, cols. 280–1).

⁵¹ For a more extended discussion of the topic, see Ettinghausen 1972, pp. 45–6.

⁵² As a corrective it is worth noting that the basic meaning of the root *y.s.z.*, whose clative gives the meaning 'left', is 'ease', with a common association of 'prosperity'.

⁵³ There is an apparent exception to this rule—the huge double frontispiece datable to c. 1300 and remounted in an album in the Topkapı Sarayı Müzesi, Hazine 2152, fols. 60v–61r (see n. 15 above). Here the right-left dichotomy operative in the Schefer *Ḥarīrī* frontispiece is reversed. While the image of the ruler himself does not exclude the possibility that it was intended for a right-hand page, the direction of movement in the companion leaf implies that

THE MEANING OF THE TWO IMAGES

For all the minor discrepancies between the two panels which have been discussed so far, the first impact of the 1237 frontispiece is of two equal panels set within borders decorated in identical fashion. Yet there also develops a continual tension between the demands of symmetry and the need to exalt the official figure at the expense of his counterpart opposite. Why should the artist set himself this almost insoluble difficulty? The answer to this question should also clarify the last of the five topics outlined at the beginning of this paper: the meaning of the two images.

It is important at the very outset to emphasise that the iconography of this double frontispiece is innovative. No similar combination of figures is known in Islamic, or even for that matter Byzantine, book painting, though in the latter tradition there is at least one example (the Vienna Dioscorides of 512) of two important images of seated figures following each other in close sequence. Thus it might be argued that the novelty lies in the combination—that is, in the close juxtaposition of the two images—rather than in their component parts. At the simplest level, the three-tier composition comprising, in descending order, angels or victories, a lone figure of authority, and a group of lesser figures, was an iconographic topos in Byzantine as in early Islamic art. The ruler page of the 1237 frontispiece is entirely explicable as a variation on this familiar theme, with its main interest lying in the idea of incorporating an audience scene into this iconography of power. Nevertheless, the whole point of such images is that they should enjoy unchallenged predominance in the page opening allotted to them. That is an integral part of their message. If there is a picture on the opposite page, as is sometimes the case in Byzantine frontispieces,

the ruler image was indeed on the left. Yet there is a key to this apparent discrepancy: the right-hand page contains no single image which could be construed as rivaling the enthroned ruler opposite. It is precisely the presence of a competing image in the Schefer *Ḥarīrī* frontispiece which makes the choice of the right-hand page for the *amīr* image a significant one. Where no competition exists, the notion of dualism loses its power, and it is no longer of such critical importance that the figure of authority should occupy the right-hand page. For a colour reproduction of this key frontispiece, see Ipşiroğlu 1971, pls. 23–4.

some of which indeed have a whole sequence of such portraits;⁵⁴ the picture opposite will conduce, usually in a very direct way, to the impact of the main image.⁵⁵ Hence Byzantine double frontispieces contain a plethora of worldly and spiritual references to the emperor's power. It is not a question of competition but of complementarity between one page and another. Yet there can be little doubt that the idea of competition is built into the Schefer Ḥarīrī frontispiece. The two images vie for attention and their similarity makes it impossible to interpret one as the handmaiden, so to speak, of the other. This very similarity proclaims that each has its own separate existence, not that they constitute obverse and reverse of a single coin. It might be worth noting, parenthetically, that it is precisely in the field of Muslim numismatics that an analogy to the double royal frontispiece may be found. Such few coins as do use figural images invariably have a bust on the obverse and some less concentrated royal image on the reverse (Fig. B). This practice may be understood as the numismatic equivalent of the symbolism inherent in the contrast between right and left.

The preceding discussion has established beyond question that models for the ruler page abounded, and indeed that it was common practice, both in Byzantium and in the Islamic world, to reserve the frontispiece for an image of the ruler. The surviving volumes of the *Kitāb al-Aghānī* show how varied the iconography of kingship could be in such contexts. Thus the repertoire of royal iconography contained enough ideas at this time to have accommodated without strain a demand for a double royal frontispiece. Yet that is not what al-Wāsiṭī provides here. The similarity between the two pages of the 1237 frontispiece excludes the possibility—as indeed does the difference in facial type—that the artist is representing the same person twice. Who, then, can the person on the left-hand page be?

It will be as well to dispose of the lesser possibilities first. The suggestion that the figure hitherto identified

in this paper as the ruler is in fact the wife of the man with a turban, and that the latter is the ruler himself, has been put forward⁵⁶ but is not worth serious consideration. The right-hand figure is, after all, the possessor of two drooping moustaches, while the left-hand figure is heavily bearded. The numerous devices employed to exalt the right-hand figure would also accord ill with an identification of this figure as the ruler's wife. A suggestion that these are Baghdadi angels,⁵⁷ whatever that phrase may mean, is also not worth entertaining. But it is not impossible that the figures refer generically to the text of the *Maqāmāt*.⁵⁸ It would be strange to single out a particular *maqāma* above the others, and stranger still not to identify it. If a scene from a specific *maqāma* is to be ruled out, perhaps the figures represent the two chief characters of the *Maqāmāt*, namely Abū Zayd and al-Ḥārith. This idea is extremely unlikely, not only because the right-hand panel is brim-full of images with royal connotations but also because Abū Zayd is consistently described as an old man with a white beard, and therefore corresponds to neither of the two main figures in the frontispiece. Even less persuasive is the possibility that the left-hand page has some symbolic significance; not only are such symbolic images rare in Islamic frontispieces, but they bear attributes which invite interpretation. No such attributes can be detected on the left-hand page.

The clues to the meaning of this page are to be found both in the composition itself and in the models from which it derives. Only one tradition rivalled that of the ruler image as a subject suitable for frontispiece decoration, and this tradition was familiar in classical, Byzantine, early Western medieval and Islamic art alike: the author portrait. Admittedly, the conventions which had been developed for this subject in the first millennium CE were somewhat different from those that operate in the Ḥarīrī frontispiece. Very often the author is entirely alone on the page and stands out against a uniform gold back-

⁵⁴ As in the 11th-century *Homilies of St. John Chrysostom* in Paris (BN Cod. Coislin 79), which has four portraits of the Emperor (Omont 1929) or the 14th-century *Typikon* in the library of Lincoln College, Oxford, Gr. Ms. 35, which has no fewer than ten portraits of the imperial family (Rice 1968, p. 357).

⁵⁵ The solution adopted in the 1199 Paris *Kitāb al-Dīryāq* is at once simple and direct: repetition.

⁵⁶ Hamid 1966, I, p. 251.

⁵⁷ Farès 1953, pp. 16–17 and 28.

⁵⁸ Grabar 1984, p. 23, following Ettinghausen 1962, pp. 111 and 114, suggests that they may refer to the *qādī* and the *amīr*, stock protagonists of many *maqāmāt*; he further suggests that the figure on fol. 1v could be al-Ḥārith's forerunner in the *maqāmāt* genre, al-Hamadhānī. But the princely accoutrements and attributes of this figure argue against such an interpretation.



Fig. B. *Dīnār* with 'standing caliph', Umayyad, 74 (693-4) (drawing by Dzul Haimi b. Muhammad Zain)

ground. It is customary for him to hold his book or to be actually engaged in writing it. Standing images outnumber seated ones. Occasionally the author will be shown in the act of dictating to a scribe. Other secondary figures found from time to time include the author's inspiration, who takes human form as a female figure bending over to speak into his ear, and other personifications. Several of these iconographic types had made their way into Islamic art by the early 13th century, among them the solitary seated author and the author accompanied by his disciples.

How, then, is the left-hand page of the Ḥarīrī frontispiece to be fitted into this group of images? If it is indeed an author portrait, why is there no sign of a book? And what is the point of all the people below him? Why, finally, does the artist risk *lèse-majesté* by placing him so nearly on a par with the ruler opposite? The answers to these questions will shed new light on the originality and resourcefulness of the artist responsible for this manuscript, al-Wāsiṭī, and will highlight his qualities as a painter well ahead of his time.

It was nothing short of a brainwave to make double capital out of an idea which was itself new: to show the main figure exalted above a mass of lesser figures, but nevertheless occupying the same space. Earlier imperial iconography had favoured the placing of secondary figures on either side of the principal one. On the rarer occasions when they were placed below, a system of self-contained compartments prevented them from intruding into the world of the main figure. In the 1237 frontispiece the two groups, though so similar as to be virtually identical, have distinctively different functions. As argued above, it seems plausible that the ruler panel depicts a scene of royal audience—perhaps the *ḍawān al-ʿamm*. Sufficient literary descriptions of such ceremonies exist to establish that serried ranks of onlookers or participants were a normal feature of these occasions.⁵⁹ Within the limited space available, al-Wāsiṭī has done his best to evoke such a scene. What made excellent sense in one panel was, however, a possible embarrassment in the other. It certainly required an adaptation of existing iconography. The smoothness with which this potentially awkward transition has been accomplished excites admiration. In the right-

hand panel the lower figures make most obvious sense as participants in a royal audience; in the left-hand panel they become an audience of a different and more usual kind, for they seem simply to be listening to what the main figure is saying. This is where the three-quarter view adopted for that figure comes into its own. It is proper in a formal royal audience for the ruler to be both physically and metaphysically above his people, and the frontal view employed for the ruler in the right-hand panel is an apt expression of that remoteness. Equally appropriate to its context is the three-quarter view used for the main figure in the left-hand panel, for it expresses in an effortlessly natural way the interplay between the narrator and his audience. This emphasis on narrative explains the unprecedented gathering of listeners, a feature that has no place in the traditional iconography of the author portrait, and the speaking gesture of the raised right hand made by the man with the turban—which, incidentally, absolves him from the need to hold a book. Moreover, the practice of public recitation of famous works of literature is well attested in the Islamic world, and the evidence suggests that at times such performances took place in a court setting.⁶⁰ For those whose competence in Arabic as a literary language was not enough to appreciate the finer points of this notoriously difficult text—and it is readily conceivable that Turkish *am̃rs* might belong in this category—the readiest access to the stories of the *Maqāmāt* might well be to *see* an illustrated version rather than to *read* it. The pose of the man with a turban, incidentally, can be read to imply deference and to suggest that the book was intended for the ruler. Nor should one lose sight of the possibility that some appropriate pun is intended on the very title of the work itself, for the word *maqāmāt* means assemblies, and that is exactly what we see depicted here. Indeed, the same kind of interaction between storyteller and audience is replicated in several of the paintings later on in the volume.⁶¹

⁶⁰ It is the context of a good deal of the *Kūtab al-Aghāmī*.

⁶¹ Using Grabar 1984, see—for images of a speaker raised above his audience—*maqāmāt* 17 (fol. 46v, microfiche 3/F8), 21 (fol. 58v, microfiche 4/E1), 28 (fol. 84v, 5/F1), 33 (fol. 103r, 6/G9), 37 (fol. 114v, 7/E4), 40 (fol. 125r, 8/A7) and 47 (fol. 156r, 9/C9); cf. also 42, fols. 131v and 133v (8/C10–11) for images of a seated speaker addressing a seated audience. The connection between this frontispiece

⁵⁹ Kennedy 2004, pp. 139–41.

One detail in particular speaks for the hypothesis that the main left-hand figure is al-Ḥarīrī himself: he was no longer alive. Thus he does not present the same kind of challenge to the *amīr* that a living figure would. Moreover, the author portrait was the obvious choice for a frontispiece theme if a ruler figure was not being depicted. Some author portraits, both Byzantine and Islamic, also feature the distinctive detail of a hand raised in a gesture of speech,⁶² though admittedly there are not crowds of people in attendance. The winged beings in the spandrels above the figure make good sense if he is the author, for their connotations of glory and exaltation would be entirely appropriate for this most popular writer, instead of a distracting irrelevance. In this detail, as in the case of the audience itself, one can observe the artist's use of an identical theme in two quite different ways. Thus the potentially conflicting needs of visual symmetry and of iconographic function are met and resolved without the slightest jar.

Here, then, perhaps uniquely among Islamic manuscripts, is a case where the author is placed on a well-nigh equal footing with the representative of secular authority. It is a momentous statement. What possessed Yaḥyā al-Wāsiṭī to make it? Attention has already been drawn to the fact that he was both scribe and illustrator, as he himself attests. This would have predisposed him to consult his own preferences for the layout of the opening pages, as for the rest of the manuscript. He was thus in an unusually privileged position and could profit from this independence to devise a new kind of formal visual introduction to the text. Once this freedom from constraint is recognised, the full significance of al-Wāsiṭī's solo performance clicks into place. To transcribe the entire text, to insert explanatory glosses, to provide it with a remarkably full and varied complement of illustrations, and to carry out both of these tasks without collaborators, bespeaks an unusual commitment to the *Maqāmāt* as a text and as a quarry for visual material. Al-Wāsiṭī would have had to commit many months of his life

to this project. It should therefore not stretch credulity to suggest that he might well have cherished a particular affection for this work,⁶³ and that al-Ḥarīrī might indeed have been one of his favourite authors. What more natural token of his regard than to represent that author in the frontispiece? Presumably the realities of daily life, and the constant need to find a patron to finance the expensive undertaking represented by such a book, dictated the presence of the ruler image in the traditional place of honour. Yet al-Wāsiṭī set up the author portrait as near as he dared to that of the still undetermined patron, and by the various shifts detailed above made it clear to the discerning viewer that the ruler image took precedence. The colophon makes it clear that no high-ranking patron commissioned the manuscript. Al-Wāsiṭī therefore had no specific patron to flatter, though of course he had to bear a prospective patron in mind. Presumably he produced the manuscript speculatively, for the market; nevertheless, he took out sufficient insurance against any future charge of *lèse-majesté*. The ruler is conceived as a generic image that implies respect for the office rather than for a specific individual. There was never any question that the dead author should be allowed to triumph over the living embodiment of secular authority; but their relative equality in visual terms underlines the interdependence of the men of the pen and the men of the sword.

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and the text of the manuscript is pointed out by both Grabar 1984, pp. 22–3 and O'Kane 2003, p. 49.

⁶² For Byzantine examples, see Weitzmann 1977, pls. 16 and 35 and Hoffman 1993, fig. 10; for Islamic ones, see three manuscripts in Istanbul: the 1229 Dioscorides, the *Mukhtār al-Ḥikam* and the *Rasā'il Ikhwān al-Ṣafā'* (Ettinghausen 1962, pp. 68–9, 75 and 98–9).

⁶³ It is relevant to point out here how much care al-Wāsiṭī has taken, in his role of scribe, to gloss certain passages of the text (in red ink).

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THE USES OF CAPTIONS IN MEDIEVAL LITERARY ARABIC MANUSCRIPTS

Bernard O'Kane

The study of medieval Islamic manuscript painting has benefited much in recent decades from the shift from the mostly stylistic considerations of previous studies to research on the more complex interactions of text and image.¹ There is no text more intimately related to an image than its caption, a text that can perform several roles, including an intermediary one between the main text and the image. This paper will discuss some of the roles that captions played in medieval literary manuscripts, concentrating on three manuscripts whose captions were written by the calligrapher of the main text and are thus contemporary with it.

The evidence for the existence of illustrated literary manuscripts in the first centuries of Islam is scant. The best candidate might be the *Kalīla wa Dimna* of Ibn al-Muqaffā', for which we have the report of al-Ṭabarī that a judge in the Abbasid period had one at home.² However, it does not seem likely, to judge from the surviving manuscripts, that they were ever plentiful, and the earliest surviving examples are only from the thirteenth century.³

More prevalent earlier were scientific manuscripts, which also remained popular as a vehicle for illus-

trated examples. As a category, scientific manuscripts are ones that as a matter of course had illustrations provided with captions.⁴ The necessity to differentiate various kinds of shrubs that could be used as medicine, or snakes whose bites affected the nervous system in different ways, or parts of the body that could be operated on, was clearly an essential element of their function. The captions to these illustrations tended to be pithy, there being no need to elaborate an identification that was referred to and explained at greater length in the text. This did not stop the painters from adding superfluous detail, although the most celebrated examples of these, the Istanbul *De Materia Medica* manuscripts, have captions whose conciseness matches the text rather than the more elaborate paintings.⁵

What was the case with literary manuscripts? First we should define what should be included in this category. The most obvious candidate is the *Maqāmāt* of al-Ḥarīrī, a work celebrated for its literary virtuosity to the extent that it has been wondered

¹ As typified by the present volume and the conference on which it was based.

² O'Kane 2003, p. 28.

³ O'Kane 2003, Appendixes 1–9.

⁴ Hoffmann 1982; Hoffmann 2000; Weitzmann 1952.

⁵ Topkapı Saray Library, Ahmet III, (dated 626/1229); illustrated in Ettinghausen 1962, pp. 72–3 and Rogers, Çagman and Tanındı 1986, figs. 16–19; Sülemaniye Library, ss. 3703, dated 621/1224; illustrated in Ettinghausen 1962, pp. 87, 89, and in a series of detached paintings now in the Freer Gallery, in Atıl 1975, pp. 54–60. See also Grube 1959.

why it needed any illustrations. However, the stories it contains, even if relying on verbal pyrotechnics, do have a variety of settings and on occasion a considerable cast of characters, all that was needed to spur the artists to create paintings ranging from the masterpieces of al-Wāsiṭī to the highly polished but more barren pictures of the text in the Vienna Nationalbibliothek.⁶

The other main candidate for literary manuscripts would be *Kalīla wa Dimna*.⁷ This is sometimes included within the category of mirrors for princes, but the amoral character of the stories, and the frequent illustration of the immoral ways of the world, such as those, for instance, that cause the pious ascetic to repent of his desire for worldly goods, suggest that the moralizing of which so much of the text consists was less an attraction than the racy side stories.⁸ It was also valued for its literary qualities, Ibn al-Muqaffā's translation being considered a model of prose.

What kind of information does, or should, a caption contain? There are a number of possible approaches, not only in medieval manuscripts but even within the modern context of providing captions for reproductions of paintings from manuscripts.⁹ The answer may partly depend on who wrote the caption, there being three obvious possibilities. The first is the calligrapher of the manuscript, the second is the painter (but one should keep in mind that he and the calligrapher need not be two different persons), and the third is a later viewer.

Consider, for instance, the caption in a Mamluk *Kalīla wa Dimna* painting (Fig. 1) of the story normally abbreviated in contemporary art historical literature to 'The Perils of Life.' This, clearly the work of the calligrapher, starts in red ink in a larger size than

that used for the main text. Translated, it begins: 'image of the man falling in the well holding on to the branches while the rats...'—and here the calligrapher realized that for the long caption he wanted, the larger script in red that he was using would take up too much space, so he reverted to the smaller black script that was used for the main text, and continued on the next line, mentioning the dragon at the bottom of the well and the four snakes on which the man's feet rest, squeezing in the last words by positioning them almost above one another. In this caption virtually everything relevant to the key elements in the painting is mentioned, except for the beehive and its honey, which the man tastes.

One may contrast this with the caption from a *Maqāmāt* manuscript datable to the early thirteenth century,¹⁰ illustrating the thirteenth *maqāma*, in which Abū Zayd poses as an old woman with malnourished children to gain the crowd's sympathy (Fig. A).

The caption on the left beside the two figures reads *ṣūrat al-ʿajūz wa-l-ṣibya* 'image of the old person and the youths.' This corresponds to the text, but ignores the painting in which only one child is depicted, and also does not refer to the crowd of people who are Abū Zayd's audience.

How many literary manuscripts, like the two above, have captions that were written by the calligrapher? In addition to the *Maqāmāt*, Paris 3929 and the Oxford *Kalīla wa Dimna*, there is one in the British Library, Add. 24350, that has captions but whose paintings were never executed.¹¹ Only one of these, Paris 3929, has a caption for every one of its paintings. On a number of occasions¹² captions and chapter headings at the beginning of a *maqāma* appear together on the same page, easily permitting a comparison of their fine calligraphy and large script that confirm that the calligrapher of the text was indeed responsible for both.

Illustrations on two facing pages (fols. 58v–59r) from the same manuscript¹³ of the thirty-first *maqāma* show al-Ḥārith and Abū Zayd embracing in the folio on the right, exactly what the caption describes, although the concluding folio on the page opposite the story simply summarizes the situation by the

⁶ Ettinghausen 1962, pp. 106–22, 150–1.

⁷ Another relevant manuscript is *Ḥadīth Bayāḍ wa Riyāḍ*, Vatican Ar. Ris. 368, which has captions evidently written by the calligrapher in some of its paintings: see Ettinghausen 1962, pp. 125–31 and Robinson 2001, inc. pls. 1–3. As I do not have reproductions of all of the illustrations of this manuscript I have not considered it further here. However, even though it is in many ways a unique manuscript, it would be worthwhile comparing its uses of captions to those of the more popular *Maqāmāt* and *Kalīla wa Dimna* traditions.

⁸ This is dealt with more fully in O'Kane 2003, p. 26.

⁹ Unfortunately I have not found any medieval equivalents of the humorous-ironic category that makes reading *Empire* magazine such fun.

¹⁰ Following the dating of Ward 1985.

¹¹ O'Kane 2003, Appendix 7, 222–4.

¹² E.g. fols. 26r, 37r, 41r and 53r.

¹³ Guesdon and Vernay-Nouri 2001, p. 136, no. 99.



Fig. A. Abū Zayd, Disguised as an Old Woman, Fools the Crowd. Al-Ḥarīrī, *Maqāmāt*, Diyarbakir, early 13th century. Paris, Bibliothèque nationale de France, arabe 3929, fol. 37r (Courtesy of the Bibliothèque nationale de France).

caption *wa hādhihi šūratuhu* 'and this is its image.' The location of this caption on f. 59a, cramped in the margin leaving much blank space above the painting, is rather puzzling, especially as it seems that the captions in this manuscript were written after the paintings were completed. This is suggested by the relationship between the caption and painting in the example we studied above (Fig. A). The *kasra* of the word *ʿajūz* in the caption, as in some other cases within the manuscript,¹⁴ overlaps part of the painting. There was no room for the caption at the top of the painting on this folio, so the calligrapher shifted it to the side of the page, the vertical orientation clearly not being, to his mind, of any great consequence. There are nineteen captions out of its 77 paintings that follow this vertical format, always reading from top to bottom. Those on the right invariably are on the b side,¹⁵ where extra space was available in the margin, and those on the a side on the left.¹⁶

More extraordinary, and unique in my study of captions, are two examples in this manuscript which bend around the frame. They are found on consecutive folios in the same *maqāma*, the 27th, whose story involves al-Ḥārith searching for his strayed camel, Abū Zayd encountering al-Ḥārith and stealing his horse while he is sleeping, al-Ḥārith encountering his camel, whose rider refused to give it up, followed by Abū Zayd coming upon the pair and rescuing the day by threatening to attack the rider with his lance. As a result the camel is recovered, although Abū Zayd keeps the horse. There are four painting illustrating this *maqāma*, the first of which (fol. 101v) shows Abū Zayd encountering al-Ḥārith and his horse; it has a long two-line caption positioned in the margin to the right of the painting. The caption of the second (fol. 103r) describes al-Ḥārith and Abū Zayd sleeping beneath a tree; the caption begins just after the text and bends around into the left margin. The horse which is central to the story is not depicted. For the third episode (fol. 104r) (Fig. B), when Abū Zayd arrives and scares off the rider of al-Ḥārith's camel, the caption is again bent around the picture frame:

šūrat al-Ḥārith wa khaṣmihi wa qad hajama ʿalayhimā Abū Zayd bi-rumḥihi; 'image of al-Ḥārith and his adversary, Abū Zayd having pounced on them with his spear.' The painting seems to depict what looks more like a genteel disputation than a fight, with Abū Zayd's spear rendered as a staff, but since we know the caption was written by the calligrapher of the text, perhaps we can divine another purpose of captions: to clarify what the painter failed to render accurately in his image. The bent format of the captions with the calligrapher starting in what was the blank space left in an uncompleted line of regular text before turning the corner is another confirmation of this unusual method working, where the calligrapher evidently seceded the manuscript to the painter and then reclaimed it to add captions when the paintings were finished.¹⁷

Let us examine paintings from another text, that of *Kalīla wa Dimna*, which takes its name from the two jackals, brothers, one power hungry, the other wary of court intrigues, who at various points in the text debate the relative merits of different courses of action. As a result, images of two jackals conversing are the single largest group of paintings in the illustrated manuscripts. Looking at two examples, one from Oxford, explicitly captioned 'Kalīla and Dimna Conversing' and the other from Munich, both of the same period (Figs. 2–3), one might dismiss them as typical examples of this large group, except that the break-line above the image in each contains the words *al-muṣawwir al-māhir*, the skillful painter. This recurs in the two other manuscripts of this Mamluk group which illustrate the same text at this point, one of which, London,¹⁸ whose paintings were never executed, has the same caption 'Kalīla and Dimna Conversing.' Of these four only that of Oxford is dated (755 (1354)), but the very close relationships

¹⁴ E.g. on fol. 40v, when the caption, in the right margin, also crowds the original text.

¹⁵ E.g. on fols. 7v, 21v, 23v, 40v, 50v, 84v, 101v, 155v, 156v, 165v and 178v.

¹⁶ E.g. on fols. 37r, 41r, 46r, 105r, 120r, 134r, 177r and 179r.

¹⁷ Although again, it should be borne in mind that this procedure would be easier if the calligrapher and painter were one and the same person. What at first looks like another confirmation of this procedure is found on fol. 148, which has spaces on both pages left for paintings that were never executed; they do not have captions. However, as far as I am able to judge from the microfilm, the calligraphy of this folio is different from the rest of the manuscript, raising the possibility that it is a later replacement.

¹⁸ I use this shorthand for referring to British Library Add. 24350, for which see O'Kane 2003, Appendix 7.



Fig. B. Picture of al-Hārith and his adversary and Abū Zayd pouncing on them with his spear. Al-Ḥarīrī, *Maqāmāt*, Diyarbakir, early 13th century. Paris, Bibliothèque nationale de France, arabe 3929, fol. 104r (Courtesy of the Bibliothèque nationale de France).

between them have been studied in depth in earlier works.¹⁹

It is interesting to compare this with the only illustration of the same portion of the text in the earliest surviving Persian manuscript of the text, H. 363 of the Topkapı Saray Library, datable to 1265–80, which shows the skillful painter in question (Fig. 4). This merits discussion on account of its subject matter, which would be impossible to guess without knowledge of the text. Dimna compares the skill of the courtier who can make the truth seem untrue, and the untrue seem the truth, to a painter who can represent a scene in which the figures seem to be placed in front of or behind a wall, even though its surface is two-dimensional. The subject matter recalls Maqrīzī's account of the contest between the two painters of the late-tenth-century mosque of the Qarāfa near Cairo; one, Ibn 'Azīz, made his painting so that the figure appeared to be in front of the wall, the other, Qaṣīr, accomplished the apparently more difficult feat of making the figure appear to be behind the wall.²⁰

The likelihood of this being a topos is increased by the fact that in the four Mamluk illustrations the calligrapher left a space for a painting at precisely this point in the text. The artists here had the opportunity to display skills worthy of the text, but perhaps understandably, tried not to call attention to their limitations by portraying Kalīla and Dimna conversing instead.

What can we deduce from this? A first pointer might be to the independence of the Arab and Persian illustrative traditions, although that would of course need much more evidence than merely these examples. But it also provides good evidence that the subject was popular in earlier Arab manuscripts that have not survived. At some stage the artists declined the text's invitation to promote their painterly skills and instead showed the two jackals conversing. Two of the ways in which a calligrapher copying out the text might have decided to leave a space for illustration would be firstly, by stopping at a moment in the story which calls for an interesting illustration or secondly, by stopping at the identical point in a manuscript from which he is copying that

has an illustration. These decisions could be further influenced by whether or not the calligrapher was also the painter, and of course one can conceive of other scenarios whereby in a large atelier a workshop head planned the order of illustrations and informed the calligrapher correspondingly.

The fact that the London manuscript has all of its calligraphy of the text and captions complete with the spaces left for miniatures may argue for its having been written in such an atelier, where the calligrapher got on with another job while the painter's in-tray accumulated and he never got round to finishing it.

Both the London and Oxford manuscripts are exceptional among *Kalīla wa Dimna* manuscripts in that they are the only ones that consistently provide original captions. London has every painting (or rather space for a painting) captioned but two; Oxford has original captions on 68 out of 78 paintings. This raises the question of why they were not all captioned. Are those without captions of such well-known stories that it was thought they would not be needed?

This does not seem to be the case, or at least, not necessarily. Of the ten missing captions in the Oxford manuscript, seven are from the first ten subjects illustrated, suggesting that the calligrapher forgot at the beginning, or was not told that captions were expected.²¹ Could the captions in fact have been added later? But a characteristic of these two manuscripts suggests that this was not the case, namely, the fact that in one case in Oxford²² and in eleven cases in the London manuscript,²³ captions are found for an illustration at the foot of the previous page. This matters less if the illustrations are on the

²¹ The missing examples are on fols. 12v, 13v, 18v, 20v, 21v, 22r, 45r, 73v and 104v.

²² Fol. 94r, where the painting is at the top of the page, and the caption is at the foot of fol. 93v.

²³ Fols. 27v–28r, 34r–v, 46v–47r, 59v–60r, 88v–89r, 90v–91r, 98r–v, 116v–117r, 131v–132r, 156v–157r and 158v–159r. This may seem to us like a basic misunderstanding of one of the elementary rules of page layout, but I admit I have had to revise this view on seeing in my students' papers just how many of them make the same mistake, even with the miracle of word processors at hand when it could be corrected at the touch of a button. However, they have the excuse of not necessarily seeing the result on the screen after formatting, a defense not available to the calligrapher.

¹⁹ Walzer 1959; O'Kane 2003, Appendixes 4–7.

²⁰ Discussed further in O'Kane 2003, 82.

r side, since the caption on the **v** side would still be visible while looking at the illustrations on the subsequent page. Indeed, on nine of these eleven occasions, the captions are on the **v** side of folios, but even the decisive visual break of the two on the **r** side did not cause the calligrapher to change his layout. On one such occasion, however, the London scribe realized perhaps that this might not be the best course of action and added the caption at the top of the subsequent page as well, even when this was one of the occasions when it would have been visible as a two-page spread (Fig. C).

To return to the several paintings in Oxford without captions, was there any obvious reason why they were left out? In the first, 'Burzūya is Introduced to Anūshirwān,' such is the potential for misunderstanding that a later scribe added a caption. The likelihood of its being later is on three accounts; firstly its simple script, secondly, it is in black instead of red, and thirdly it is very generalized compared to the other captions that mention Anūshirwān by name. The next, 'Burzūya Travels to India' could admittedly have been easily identifiable without a caption, as could the next, 'Burzūya and Bidpai.' The fourth shows Burzūya talking to Anūshirwān after his return from India, a subject that is virtually indistinguishable from the first that shows the two together before they went, although the caption simply mentions that they are conversing and would not help us resolve this matter.

The next is 'Buzurgmihr Reads His Biography of Burzūya,' and since the text explicitly mentions that this took place on a *minbar* this might be sufficient to trigger this association in most readers' minds. The following three, from the preface of Ibn al-Muqaffā', are substories that are not particularly well-known, 'The Man Cheated of His Treasure,' 'The Young Scholar before the Learned Men,' and 'The Man Who Fell Asleep While the Thief Robbed His House,' although someone familiar with the text could certainly have recognised them from the illustrations alone.

The last two in Oxford without a caption, 'Kalīla visits Dimna in Prison' and 'The Carpenter, His Unfaithful Wife and Her Lover,' are also easily enough to recognize without a caption, but in a single one of the Oxford paintings, 'Iblad Restores Ilakht to the King,' the caption was arranged vertically at the left side of the page. This is in red ink and fine

calligraphy and presumably was done by the original calligrapher after the painting was finished. Certainly here the possibilities for confusion are many as the story is not well known, but then the question also arises, if here, why not in the other examples? One should probably remember here that we are still at the beginning of the practice of adding captions: it is understandable that the calligrapher may have forgotten a substantial number at the beginning before he was used to the idea (or was told by the workshop head to get used to the idea) and perhaps if a few were accidentally left out at a later stage it was not considered a grave omission.

Indicative of the way in which plans can go awry, the two images in Oxford from the substory of the hares and the elephants—of the king of the hares addressing the other hares—are a good example: they are on following pages, on what would be a double-page spread, and show the identical image, albeit compressed on fol. 97v because of the smaller space available (Figs. 5, 6). The calligrapher perhaps at first intended the space at the bottom of the page (97v) for a painting, but then thinking that it would not be sufficient, left a larger space at the top of the following page (98r). To discourage the painter from actually using the small empty space at the bottom of 97v, he wrote a caption there that is further separated from the text than usual. To no avail, and although it is possible from the text to interpret these as slightly different subjects, with the first being the king of the rabbits addressing his subjects and the second Fayrūz giving his advice, artistically it is an admission of failure to show the identical composition not just in quick succession, but on a double page spread.

Were the captions ever of any use, in, for instance, distinguishing between the many stories in which a jackal and a lion occur? They at least provide some help here, in that Dimna is always mentioned by name in the chapters of the Lion and the Bull and the following chapter, Dimna's trial. In the other chapters, where the jackal does not have a name, it is simply referred to as *ibn awī*.

These original captions may have functioned on several levels at the same time. Medieval manuscripts rarely contained anything like a table of contents, and captions which encapsulated the story could have served as a substitute for them. Just as the paintings would have appealed to the illiterate as an aide-mémoire for the stories, captions would also

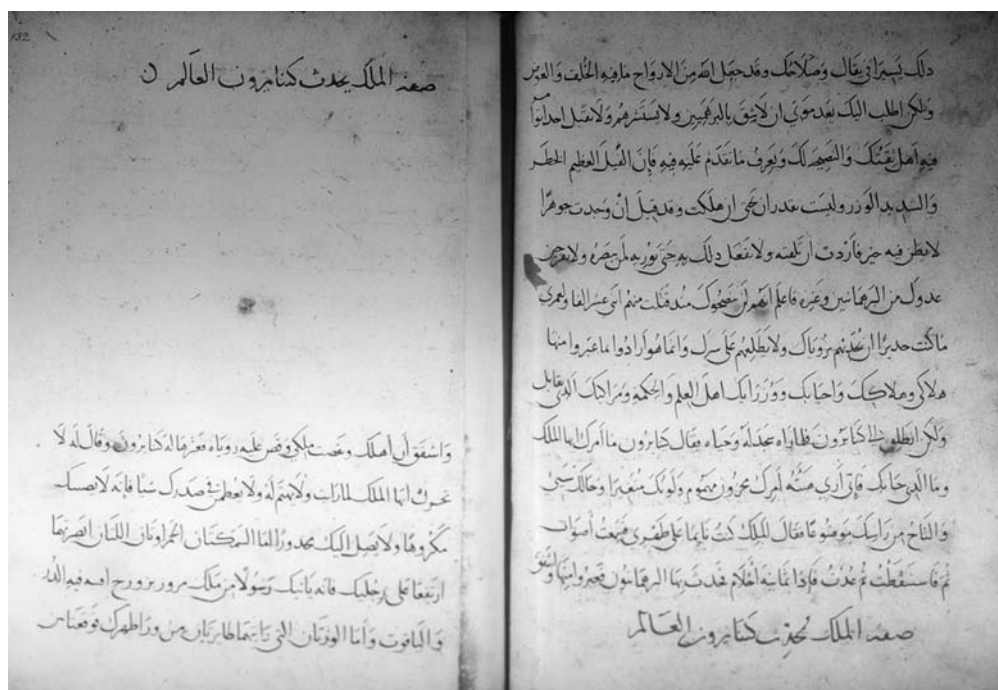


Fig. C. The King Converses with the Sage Kinairūn. Repeated caption in Ibn al-Muqaffā', *Kalīla and Dimna*, Egypt or Syria, mid-fourteenth century. London, British Library, Add. 24350, fols. 131v–132r (Copyright of the British Library).

have benefited the less than fully literate, serving as a *précis* of the stories and their key points.

Could the captions also have been aimed at the painter, paralleling directions that John Seyller has published preserved beneath the paint of some later Mughal illustrations?²⁴ Several considerations suggest that this was not the case. It would only have been relevant in an atelier system and not, as in the case of the al-Wāsiṭī *Maqāmāt*, for instance, where the calligrapher and painter were the same person. Only a small proportion of manuscripts have captions as an original feature, and they also seem to be specific to Arab manuscripts, as Persian examples are virtually unknown (the exceptions are the erratically captioned Great Mongol *Shahnāma* and a very few others). Even within manuscripts, as we have seen, there is a lack of consistency in providing captions, and the extreme care taken with the calligraphy of the original captions shows they were designed to appeal to the viewer of the text. The captions also sometimes conflate the major elements of the story, and this lack of specificity could have been useful to the painter, enabling him to combine various elements. On the other hand, they also specify elements that he did not want or was incapable of painting. For instance, the caption to 'The Ascetic Discovers His Child is Safe in the Cradle' in the Oxford manuscript refers to the weasel and the snake, yet the artist depicted only the ascetic and the infant in the cradle (Fig. 7).

What about the captions added later to manuscripts? There are too many examples of this to be examined in any detail here, but generally, as with the original captions, they provide identifications or describe the painting. Remarkably, they sometimes give incorrect information. For instance, in the Paris 3465 *Kalīla wa Dimna*, there is an illustration (fol. 20v) where Bidpai tells Burzūya how his perseverance has won Bidpai's confidence. Despite the dark skin of Bidpai, a later scribe has identified him as Anūshirwān. The caption of fol. 20r of the Munich manuscript of *Kalīla wa Dimna* identifies it as Burzūya on the *minbar*; in fact it is the beginning of the chapter of Burzūya's voyage to India, and shows Buzurgmihr narrating the story of Burzūya's voyage. That the Munich captions were added later is apparent not just from their poor quality script (although

that of the main text is scarcely more refined) but from their infrequent appearance and especially from the crossing out of mistakes that the writer made as he went along.²⁵

This kind of mistake even occurs in scientific manuscripts, if one can classify a military manuscript such as *Nihāyat al-su'l wa-'l-umniyya fī ta'allum 'amal al-furūsiyya* (An End to Questioning and Desiring [further knowledge] Concerning the Learning of the Different Exercises of Horsemanship) in this way. Rex Smith has pointed out that in the British Library copy of the work the caption is missing several words, thus rendering it meaningless; the missing part (in square brackets) can be supplied from other manuscripts: 'Illustration of a horseman with a sword in his [right hand the blade of which is on his left shoulder. In his left hand is a sword] the blade of which is under his right armpit.'²⁶

I mentioned at the beginning that with regard to early scientific manuscripts captions were considered *de rigueur* for almost all their illustrations. But this is something that lapses in occasional later manuscripts, such as the Milan al-Jāhiz *Kūlāb al-hayawān* manuscript of the Mamluk period, none of whose illustrations has a caption.²⁷ Was the example of literary manuscripts, like the St Petersburg or al-Wāsiṭī *Maqāmāt*s, enough to suggest that a close reading of the proximate text was all that was required of the viewer?

Although we have seen that a few literary manuscripts used original captions extensively, most did not. Why were they not used more often? The conservative nature of both book painting and Islamic art must have been factors here. The extent to which medieval painters of different schools were acquainted with the works of one another is still a subject of debate, and it could be argued that the innovations of the calligrapher of the Paris 3929 *Maqāmāt*, for instance, were never actually seen by his contemporaries. Only perhaps in the fourteenth century, when the Mamluk *Kalīla wa Dimnas* were made, might it have become more standard; it has also been

²⁴ Seyller 2000.

²⁵ Visible on fols. 59v and 98r: illustrated in Bothmer 1981, pp. 107, 121.

²⁶ Smith 1979, p. 28; ill. on p. 29; the manuscript is Add. 18866.

²⁷ Biblioteca Ambrosiana, Ar. A.F.D. 140, for which see Löfgren and Lamm 1946; Caprotti 1983; Hillenbrand 1990.

suggested that some of the captions added later to manuscripts, such as those of the Istanbul *Mukhtār al-ḥikam* manuscript,²⁸ were added in this period.

In summary, it is clear that a variety of approaches was taken to captioning. Captions were used to tell us what was happening in the story, or more simply, to describe what it is we see in the painting illustrating the story, or, even in some cases, to describe what it is that we were supposed to be seeing. As mentioned earlier, no text is more intimately related to an image than its caption. This paper is merely an introduction to some of the factors that might be relevant to the role of captions in mediation between text and image, and I hope it will encourage further study of the frequently complex dynamics of calligrapher, artist and viewer that this neglected topic entails.

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²⁸ Topkapı Sarayı Library Ahmet III, 3206; I am grateful to Jaclynne Kerner for this information.

SECTION 4

THE EUROPEAN CONNECTION

ANATOMICAL ILLUSTRATION IN ARABIC MANUSCRIPTS

Emilie Savage-Smith

Early anatomical illustration in Arabic manuscripts is almost entirely defined by triangles, circles, and other geometric forms executed by the use of compasses and straight edges.¹ Virtually all Arabic medical encyclopaedias and compendia had sections on anatomy—describing the bones, nerves, muscles, arteries, and veins, as well as the compound organs, which included the eye, liver, heart and brain. These volumes were often illustrated with diagrams. For example, many manuscript copies of the influential medical encyclopaedia *al-Kūtab al-Manṣūrī fī al-ṭibb* ('The Book on Medicine for Manṣūr') by al-Rāzī (d. 925) have a diagram of the brain, drawn as a triangle.² It constitutes the earliest diagram preserved today illustrating the ventricles or cells of the brain, where the various cognitive faculties were thought to be located. The triangle has two internal lines parallel to the base line of the triangle; the cell at the apex is the posterior ventricle, the locus of memory, the cell in the middle the seat of thought, and the largest cell at the base of the triangle (usually divided into two sections) is where imagination is located. This

diagram occurs in many subsequent Arabic treatises, including the popular epitome of the *Canon of Medicine* by Ibn Sīnā written in Syria by Ibn al-Nafīs (d. 1288).³ Triangles were used in Arabic treatises not just for representing the brain and its cognitive functions, but for other anatomical structures as well.

In medieval Islam, knowledge of anatomy was for the most part based on the anatomical writings of the Greek physician Galen (d. c. 210), who worked mostly in Rome though he was for a while in Alexandria. His knowledge of anatomy was derived from the dissection of animals, from which he then argued by analogy to human structures. Galen's writings were available in the Islamic world through Arabic translations made in Baghdad in the ninth century. Of those translations, only one copy, so far as I am aware, has an anatomical illustration: it is a modest triangular diagram of shoulder muscles (deltoid, as we know them) occurring in a late copy made in 1555 of the Arabic translation of Galen's *Anatomical Procedures*.⁴ Since it is such a late copy, it probably should not be taken as evidence that the Greek original was illustrated, or even that early copies of the Arabic translation were illustrated in this way. It may simply

¹ This paper is part of a larger project funded by the National Institutes of Health, National Library of Medicine Grant No. PHS2R01LM04508. A detailed comparison of the European and Islamic 'five-figure' series is being prepared by the author in collaboration with Ynez Viölé O'Neill.

² For example, a copy of *al-Kūtab al-Manṣūrī* by al-Rāzī in Bethesda MD, National Library of Medicine (NLM), MS A 28, fol. 15v, dated 1078 (1667).

³ For an example of Ibn al-Nafīs's brain diagram in his *Mūjiz al-Qānūn*, see Birmingham AL, University of Alabama at Birmingham, Reynolds Historical Library, MS Medical 5066, fol. 3r.

⁴ Los Angeles, UCLA Biomedical Library, coll. 1062, MS 90, fol. 119r, dated Ṣafar 962 (Jan. 1555).

be a marginal annotation by a later reader that was incorporated into subsequent copies. This particular diagram of muscles does not, so far as I know, occur in other Arabic anatomical treatises.

On the other hand, triangles are on occasion used to represent stomach muscles, as in Fig. A. They were also employed in a very common medieval anatomical diagram—a schematic rendering of the bones of the upper jaw. The diagram occurs in numerous manuscript copies of the *Canon of Medicine* by Ibn Sīnā (d. 1037) and subsequent commentaries and epitomes (though usually omitted from printed versions). The diagram takes two forms, one a simplified form of the other. Both occur, amongst other places, in copies of a commentary written by the Ibn al-Nafīs on the anatomy in the *Canon*—with the simpler form in the copy made in 1242, 46 years before Ibn al-Nafīs died.⁵ Both forms of the diagram are shown in Fig. B, along with an explanatory version.⁶

When seeing only the simpler form, which consists of just the central triangle and associated labels, I thought at first that it illustrated the hard palate (the roof of the mouth), with the central vertical line representing the suture running the length of the hard palate. The teeth, however, are indicated as being at the *bottom* of the triangle, rather than along the upper two sides, and this rules out the possibility of the diagram representing the hard palate. When the triangular diagram is set within the square diagram, as it is in the fuller version, the structure becomes clearer.

The illustration in effect shows the front of the upper jaw (the maxilla) and the bony structure of the nose, depicted as viewed from the front. The semi-circular lines at the top of the square diagram represent the lower edges of the orbit of the eye. The vertical lines to the left and right represent the sutures and margins of the front part of the maxilla as they are joined to the temporal bones. At the bottom of the diagram are the roots of the teeth, with the square diagram providing more information about

placement. The internal labels indicate right angles, obtuse angles, or acute angles between sutures.

There is a problem, however, for the defining sutures of the central triangle are not evident in a human skull. Galen, whose writings formed the basis of medieval Islamic anatomical writings, had dissected a number of different animals, including the North African tailless Barbary Ape (*Macaca sylvana*).⁷ Unfortunately no anatomical studies have been published of the Barbary ape, once so common throughout Europe but now preserved from extinction on Gibraltar. Consequently, historians of medicine must refer to the structure of the Rhesus monkey (*Macaca mulatta*), a native of India, when interpreting some of Galen's anatomical descriptions, even though Galen himself did not use the Rhesus monkey but rather the then plentiful Barbary ape. An examination of the skull of a Rhesus monkey reveals these very sutures, defining what comparative anatomists call the pre-maxilla—a feature not evident in either adult human skulls nor skulls of a full-term human foetus. It is evident that it is the pre-maxilla that is represented by the central triangle in this schematic diagram found throughout much of the medieval Arabic anatomical literature.⁸

Of all anatomical illustrations in Arabic material, cranial sutures are by far the most frequent. Fig. C shows a typical diagram. Five different sutures are shown: at the curved end there is the coronal suture (*iklīlī*), the line of junction of the frontal bone with the two parietal bones; at the angular end there is the lamboid suture (*lāmī*), named after the Greek letter *lambda*, which is the line of junction between the occipital and parietal bones. Down the middle of the diagram is the sagittal suture (*sahmī*), the line of junction between the two parietal bones. On either side are two 'false' or 'squamous' sutures (*kādhīb*), which are the sutures between the temporal bones and the parietal bones. A squamous suture is formed by overlapping of the broad bevelled edges of the participating bones. Cranial sutures are particularly

⁵ Los Angeles, UCLA Biomedical Library, coll. 1062, MS 80, p. 46, dated 25 Jumādā 640 (20 Nov. 1242).

⁶ The simpler of the two diagrams is reproduced from Oxford, Bodleian Library, MS Marsh 234 fol. 96a (undated 13th–14th c.) and the other from the edition of the *Kitāb Sharḥ tashrīḥ al-Qānūn*, edited by Qaṭāyah and Ghalioungui 1988, p. 77.

⁷ It should be remembered that Galen did not know the anthropoids or Great Apes. For a study of the apes known to Galen and other ancient writers, and for the spread by the Phoenicians of *Macaca sylvana* to Europe, where no primates were indigenous, see Osman Hill 1966, pp. 1–10.

⁸ See Hartman and Straus 1933, p. 44 and figs. 10, 46 and 12.

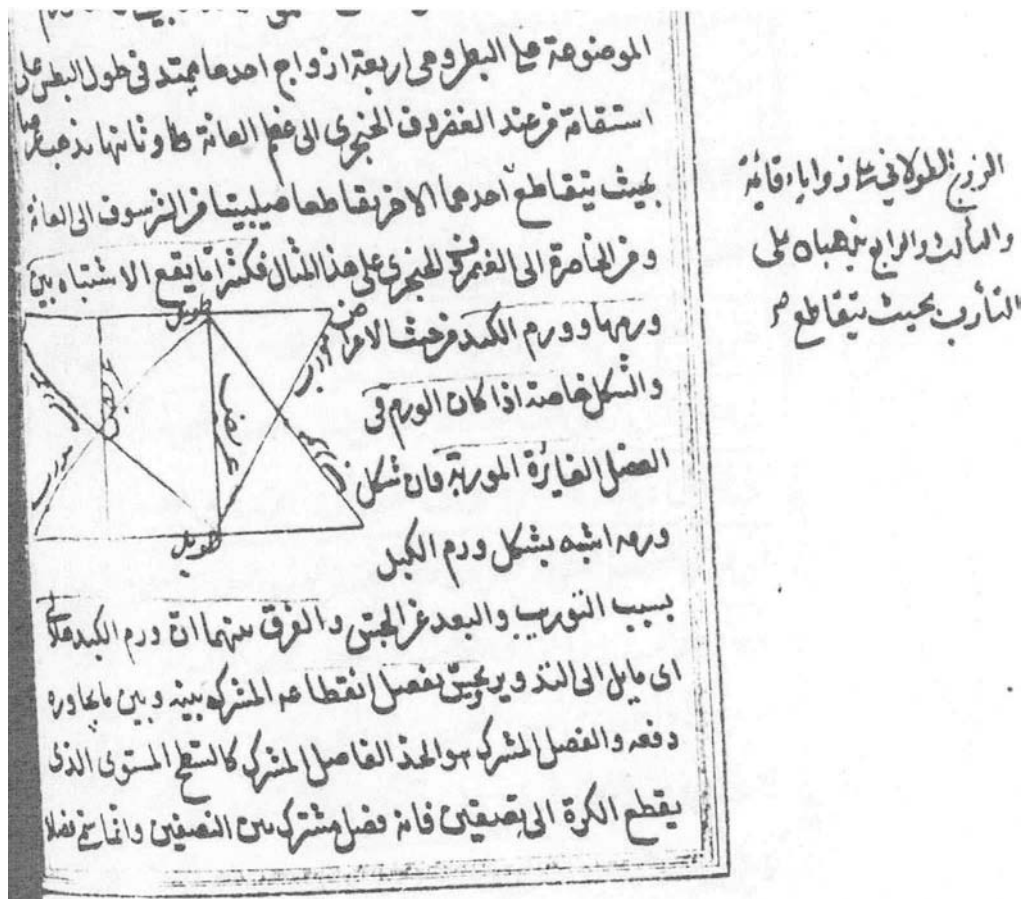


Fig. A. Diagram of stomach muscles. *Sharḥ al-asbāb wa-al-alamāt* by Nafīs ibn ʿIwād al-Kirmānī, undated, ca. 1500. Bethesda, MD, National Library of Medicine, MS A 60, fol. 355v (Reproduced by permission of the National Library of Medicine).

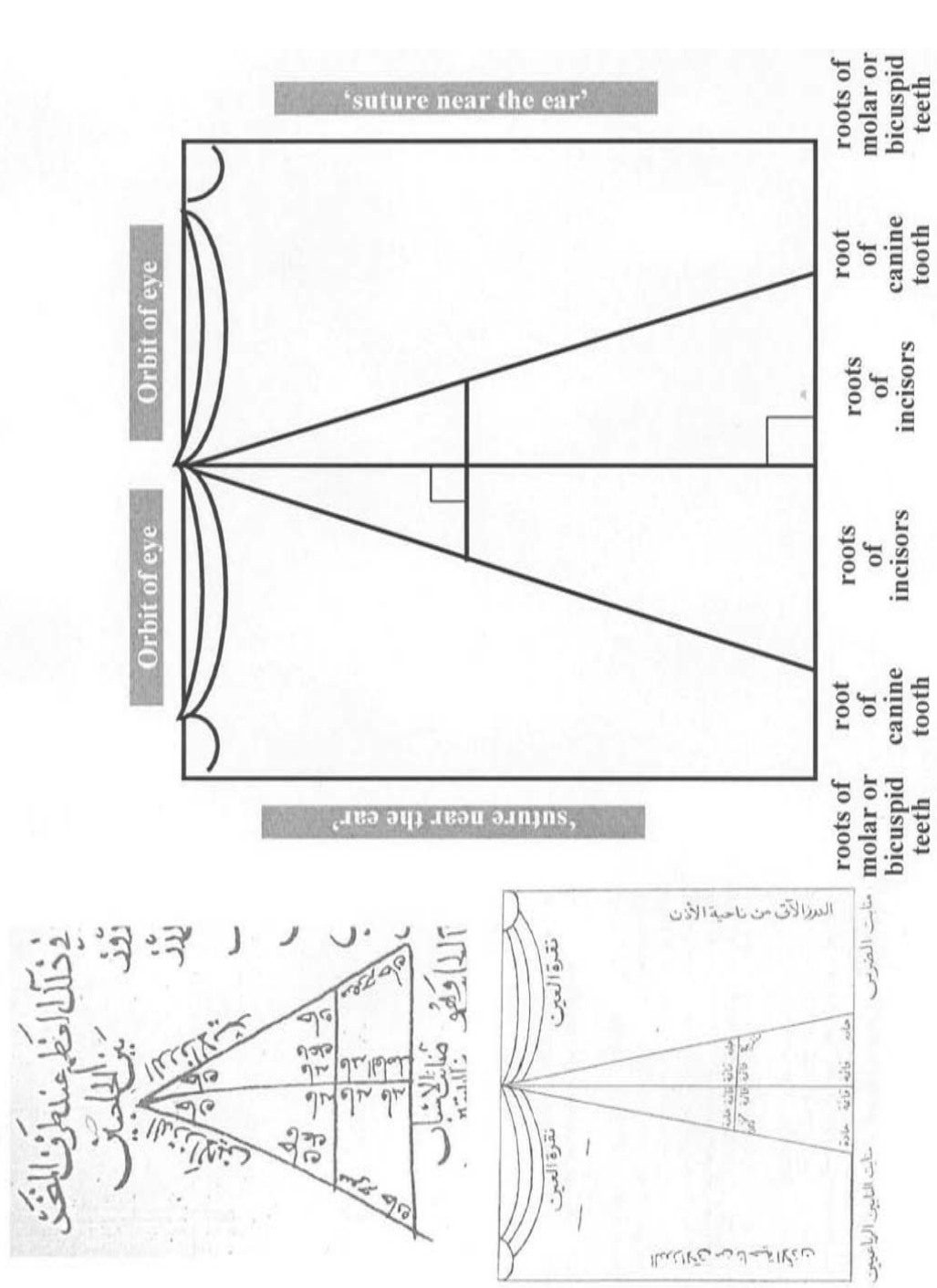


Fig. B. Diagram of the bones of the upper jaw. Based upon a diagram in Oxford, Bodleian Library, MS Marsh 234, fol. 96r (undated, 13th–14th cent.) and Ibn al-Nafis, 1988.

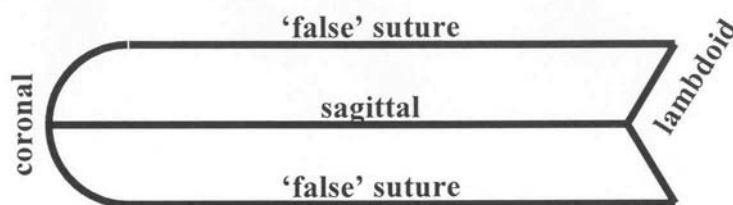
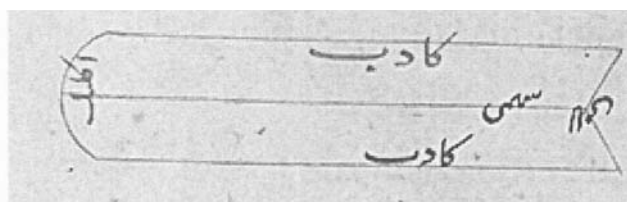


Fig. C. Common diagram of the cranial sutures.

evident on the skull of a new-born—or rather the spaces, called fontanelles, between the sutures before they knit together in adulthood. For this reason it has been suggested that still-borns were a possible source for much of the skeletal anatomy.

It is important to realize that not all five sutures can be seen on a skull at any one time. The diagram in fact presents simultaneously four different views of the skull. It is an extremely common diagram—often very tiny—in virtually all the medical compendia concerned with anatomy composed in Arabic or Persian from the tenth century onwards. While suture diagrams are also found in Arabic copies of the Alexandrian summaries of Galenic writings, which were compiled in Alexandria in the eighth or ninth centuries, they do not occur, apparently, in the Arabic translations of the full Galenic treatises themselves.⁹ Therefore, we can surmise that cranial suture diagrams first appear in the early Arabic medical writings.

Circles were another favourite geometric form employed in depicting anatomical structures, and they are particularly evident in diagrams of the eyes. The oldest preserved Islamic diagrams of the eyes are four illustrations in a copy of Ḥunayn ibn Isḥāq's *Ten Treatises on the Eye* (*Kitāb al-ʿAshr maqālāt fī al-ʿayn*).

The manuscript was completed in Syria on 1 Dhū al-Ḥijjah 592 (25 October 1196) and collated with another copy dated 394 (1003). Given the age and history of the manuscript copy, it seems reasonable to presume that these illustrations are close approximations to Ḥunayn's originals. They depict the eye and its tunics using circles, each illustration focussing upon certain features of the eye or eye muscles. They also all show two views at the same time: a horizontal cross-section of eye, set within a frontal view of the eyelids. The frontal depiction of eyelids, however, provides no anatomical information, except to remind you that it is an eye being depicted.¹⁰ The only preserved eye diagram in a Greek treatise by Galen occurs in a copy of his *On the Uses of the Parts*, and it shows a very different approach to graphically representing the eye.¹¹ Because Ḥunayn's illustrations are so different, it seems likely that illustrations of the eye were either not part of the Greek manuscript tradition available to Ḥunayn in the ninth century, or they took a very different form from the one Greek example preserved today. And indeed diagrams are not a part of any of the Arabic manuscripts extant today of Ḥunayn's translation of Galen's *On the Uses of the Parts*.

⁹ For examples of manuscripts of the *Summaria Alexandrinorum* having these diagrams, see French 1984, esp. pp. 150–1.

¹⁰ See Meyerhof 1928, plates 1–3.

¹¹ Vatican, Urbino MS 69, fol. 118r (10th–11th century), reproduced in May 1968, vol. 2 frontispiece.

From the thirteenth century, we have a very different approach to delineating the anatomy of the eye. Fig. 4 shows an illustration of the eye from a treatise on ophthalmology written in Syria about 1296 by Abū Zakarīyā' Yaḥyā ibn Abī al-Rajā', sometimes referred to as Ṣalāḥ al-Dīn ibn Yūsuf al-Kaḥḥāl al-Ḥamawī.¹² This diagram, still employing circles, shows two different views of the eyeball. The upper part illustrates a horizontal cross-section of the back half of the eye, with the hollow optic nerve at the top; the lower part shows a vertical cross-section of that same section of the eye. That is, the colourful illustration shows vertical and horizontal planes of a quarter-section of an eye.

While anatomical drawings of just the eye itself are not uncommon, diagrams illustrating the entire visual system—that is the eye and its connections with the brain—are far more frequent. The earliest preserved diagram of the eye with its connections to the brain comes from a copy made in 1083 (finished 15 Jumādā I 476) of the famous treatise on optics by Ibn al-Haytham.¹³ The copy was completed 43 years after the author's death by his son-in-law. A horizontal cross-section of the two eyes and the optic chiasma are shown, with a simple statement at the top that the two optic nerves connect with the brain. Between the eye, the nose is seen frontally, but the nose plays little role except to remind viewer of where the eyes are situated.

Circles completely dominate the most common type of diagram of visual system, an example of which is illustrated in Fig. D. It is from a copy of the *jawāmi'* (summary) of Galen's otherwise lost treatise on eye diseases.¹⁴ It is doubtful that this diagram formed part of Galen's original Greek treatise, but the fact that four recorded copies of this summary have such a diagram suggests that it circulated very early, possibly in the ninth century when the Arabic *jawāmi'* was being prepared. What is more, the basic design of this diagram runs throughout the later Arabic medical literature. It can, for example, be found in a manuscript copied in 1187 of *The Book of General Principles* (*Kitāb al-Kulliyāt*) composed in al-Andalus by

Ibn Rushd (Averroes, d. 1198).¹⁵ And it can be found in the numerous copies of the very popular epitome of Ibn Sīnā's *Canon of Medicine* that was written by Ibn al-Nafīs under the title *Mūjiz*.¹⁶

In the thirteenth century, just as we saw changes in the delineation of the eyeball, so again we can observe innovation in eye-brain illustrations. A diagram that accompanies a short treatise on the anatomy of the eye written in Herat by Najīb al-Dīn al-Samarqandī (d. 1222) is different in concept and combines the more common eye-brain diagrams with cranial sutures and other features of the cranium.¹⁷ Closely related to al-Samarqandī's diagram is one in an ophthalmological manual written in Aleppo between 1266 and 1274 by Khalīfa ibn Abī al-Maḥāsīn al-Ḥalabī (see Fig. E). While the only preserved copy having this diagram was made in the sixteenth century, the accompanying Arabic text describes the illustration in sufficient detail to make it evident that the diagram extant today is more or less like the original.¹⁸ This drawing is the only Islamic anatomical illustration that is signed by the artist; along the optic chiasma it reads: 'made by (ʿamal) Yaḥyā al-Mawṣilī'. The diagram illustrates simultaneously two, if not three, different views and cross-sections: (1) an external view of the top of the skull, showing the cranial sutures; (2) a horizontal cross-section with top of skull removed, showing the ventricles of the brain, the optic nerves, the optic chiasma, and the eyes in cross-section; and (3) the pericranium, the connective tissue covering the inside of the skull, shown and labelled (*simḥāq*) along the outside of what appears to be the cranium. In addition, the pupils are drawn as circles, which is how they appear when viewed from the front. As with illustrations of cranial sutures and eye diagrams, it is the extensive labelling of this eye-brain diagram that allows us to see that the artist was illustrating

¹⁵ Granada, Abadía del Sacromonte, MS 1, dated 583 (1187); illustration reproduced in Ibn Rushd 1939.

¹⁶ For example, Bethesda MD, NLM, MS A 43, fol. 50r (undated); Oxford, Bodleian Library, MS arab. c. 177, fol. 206r (undated); and a commentary on the *Mūjiz*, NLM, MS A 67, fol. 167v, dated Jumādā I 810 (October 1407).

¹⁷ Baghdad, Iraq Museum Library (Maktabat al-Mathaf al-ʿIraqī), MS 3770–5, copied 830 (1462); reproduced in Naqshabandī 1981, no. 128.

¹⁸ Istanbul, Yeni Jami' MS 924 (undated, c. 16th cent); reproduced in Sudhoff 1914, Tafel II; and al-Ḥalabī 1990, p. 64.

¹² Another copy, (Paris, BnF, suppl. arabe 1042, fol. 19r) has been published in several places, first by Sudhoff 1914, Tafel I.

¹³ See Ibn al-Haytham 1989, Plate 1.

¹⁴ See Savage-Smith 2002.

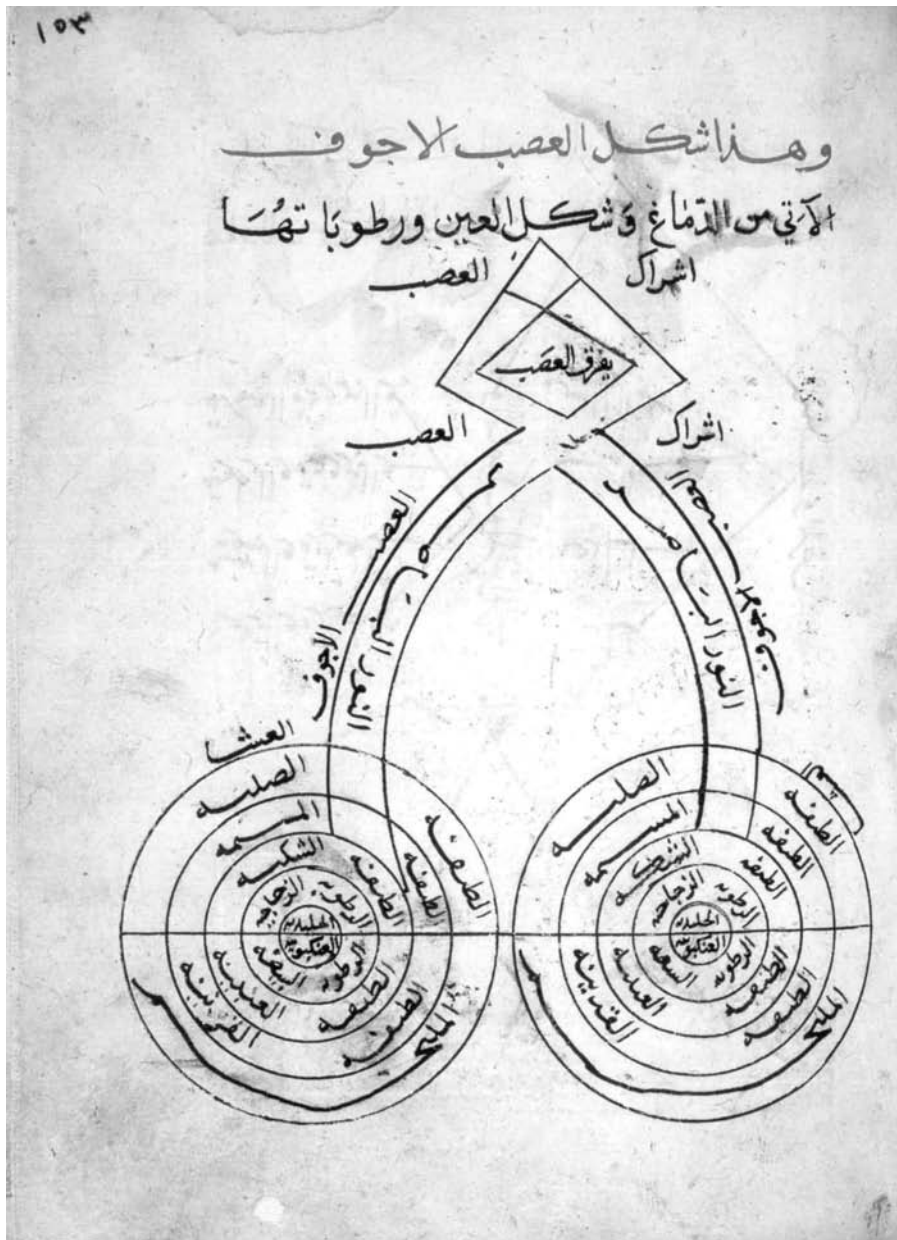


Fig. D. A diagram of the visual system. *Jawāmi' kitāb Jālīnūs fī al-amrād al-hādītha fī al-'ayn*, Rajab 834 (March–April 1431). Dublin, Chester Beatty Library, Arabic MS 3425, fol. 153r (Reproduced by permission of the Chester Beatty Library).



Fig. E. The eye-brain diagram. Khalīfā ibn Abī al-Mahāsīn al-Halabī, *al-Kitāb al-kāfī fī al-kuhl* (undated, 16th cent.). Istanbul, Yeni Jami' MS 924. Reproduced from Sudhoff 1914, Tafel 1.

structures that are not all visible from just one viewing point. The authors and illustrators themselves never refer to the fact that they are drawing more than one view at the same time, though such a spatial approach was a feature of medieval anatomical illustration in general.

As is evident from the above, the dominant anatomical illustrations in Arabic manuscripts were concerned with the skull and the structures inside it. Except for an occasional stomach muscle or bones of the hands, virtually no other organs are illustrated until about the end of fourteenth century. For reasons yet to be understood, full-figure drawings do not occur in Arabic manuscripts preserved today. When we turn to the anatomical drawings of the entire human form that are found in Persian manuscripts, however, we see the continued influence of early Arabic diagrams.

In a skeleton illustrated in a miscellany made about 1413 at the Timurid court in Isfahan for Iskandar-Sultan (a grandson of Tīmūr), the triangular representation of the upper jaw and nose, as well as pairs of lines on the cranium, clearly reflect the earlier schematic diagrams of cranial sutures and the bones of the upper jaw.¹⁹ The stance of this skeleton brings to mind the famous series of anatomical illustrations of the entire body that usually, but not always, accompany an anatomical treatise composed in Persian in 1386 for a different grandson of Tīmūr—Pīr Muḥammad, who was governor of Fars.

The author of the treatise was a physician from Shiraz by the name of Maṣṣūr ibn Muḥammad ibn Aḥmād ibn Yūsuf ibn Ilyās. The treatise is usually referred to as 'Maṣṣūr's Anatomy' (*Tashrīḥ-i Maṣṣūrī*).²⁰ Figs. 2–6 show the five illustrations in what is possibly the earliest, though undated, copy made about 1450.²¹

Maṣṣūr ibn Ilyās's anatomical tract consists of an introduction followed by five chapters on the five 'systems' of the body, each illustrated by a full-page diagram. The skeleton (Fig. 2) is viewed from behind,

with the head hyper-extended so that the mouth is at the top of the page. On the head, jagged lines mark out a triangle and two bands, which represent the cranial sutures. From the labels, it is evident that the hands of the skeleton are drawn with the palms towards the viewer, again indicating that the figure is being viewed from the back.

The full-length figure displaying the nervous system (Fig. 3) is also viewed from the back with the head hyper-extended, with the pairs of nerves indicated by inks of contrasting colours (green, red, and black). The artist, however, was confused as to the view and drew the feet as if seen from the front.

The muscle figure (Fig. 4) is shown frontally, with extensive captions describing the muscles. On the lower abdomen, the stomach muscles are depicted as triangles, in keeping with the tradition evident in Arabic diagrams of those muscles. Except for the stomach muscles, no attempt has been made to delineate any anatomical features. Rather, the human figure serves as a platform for text. Both the venous and arterial figures (Figs. 5 and 6) are shown frontally, with the internal organs indicated in opaque watercolours and various labels identifying the structures.

All five of these figures are gender neutral. They are, if you will, generic human figures, with no indication of genitalia. The treatise by Maṣṣūr ibn Ilyās also has a concluding section that is not one of the five main chapters. This final part is concerned with compound organs and the formation of the foetus, and is usually illustrated with a diagram showing a pregnant figure. This sixth figure is missing from the Khalili copy, but is found in the earliest dated copy of the treatise that is recorded, which was completed in Isfahan 894 (1488) by one Ḥasan ibn Aḥmad.²² The figure with gravid uterus was, I would suggest, the only contribution that Ibn Ilyās himself made to anatomical illustration, for all the other elements were, I believe, taken from earlier sources. Ibn Ilyās was particularly concerned with Aristotelian and Galenic embryological theories and their interaction with the traditions of pre-Islamic theories of embryology reflected in the writings on Prophetic Medicine

¹⁹ Istanbul, Topkapı Sarayı Müzesi, MS B.411, fol. 138v; dated 21 Rabī I 816 (21 June 1413); see Lentz and Lowry 1989, fig. 49, where folio of manuscript is incorrectly given as 139r.

²⁰ See also Russell 1997.

²¹ See Maddison and Savage-Smith 1997, vol. 1, pp. 18–23.

²² Bethesda, MD, NLM, MS P 18, fol. 39v; for illustration, see E. Savage-Smith 'Islamic Medical Manuscripts at the National Library of Medicine' at www.nlm.nih.gov/hmd/arabic.

(*al-ṭibb al-nabawī*), and so it is not improbable that he wished especially to have a figure to illustrate his essay.²³ Despite representing a woman with gravid uterus, this sixth figure is gender neutral, like the other figures. It was constructed quite simply, for it is merely the arterial figure, with the labels removed and an oval gravid uterus superimposed on it. The foetus in the gravid uterus is always in a breech or transverse position and is usually shown as a rather mature male.

It is evident that Manṣūr ibn Ilyās drew extensively upon earlier, predominantly Arabic, anatomical writings. In addition to these five or six full-figure illustrations, he included in his treatise smaller diagrams of the cranial sutures and the bones of the upper jaw, nose and orbit of eye—diagrams that are identical in every detail to those that occurred in much earlier Arabic anatomical treatises. Furthermore, on the full-figure illustrations he also reflected the earlier suture and muscle diagrams on the skeletal and muscular figures.

There is considerable evidence that the full-figure diagrams of the five systems (bones, nerves, muscles, veins and arteries) also had an earlier life. Of *possible* relevance is an Arabic manuscript produced in Egypt, not of human, but horse, anatomy. The picture is labelled: ‘picture of a horse laid out [or spread out] on his back’ (*hadhihi ṣifat al-faras al-mastūh ‘alā zahrihi*).²⁴ But of course he is not on his back, for he is shown splayed out stomach down and head hyper-extended—just as in the nerve and skeletal figures in the five-figure series. The internal organs of the horse, however, are depicted in a decidedly different manner from the human figures in Manṣūr ibn Ilyās’s set. It is my understanding that this is a fifteenth century manuscript, though I have not had the opportunity to examine the manuscript and its paper and inks. It is at least contemporary with the earliest copies of the series associated with Ibn Ilyās, and it may well reflect an even earlier, possibly thirteenth-century, Egyptian tradition of anatomical drawing.

In this connection I cannot resist drawing attention to an extraordinary series of four illustrations recently

acquired by the Wellcome Library in London.²⁵ One shows a horse skeleton and another an equine nerve figure, both with the anatomical features found in the five-figure Persian series, but with horse heads and tails. Moreover their horse heads are hyper-extended and the figures are viewed from behind. There are even cranial sutures indicated on the skeleton. Two of the drawings show internal organs with veins and arteries, viewed frontally, and they again are very similar to versions of the human figures associated with Ibn Ilyās, but with horse heads and hoofs. These undated drawings appear to be relatively recent (nineteenth-century?), and they are rather humorous, but they *might* just possibly reflect some earlier tradition now otherwise lost.

To return to the series of human anatomical figures. What other possible sources were there for these figures? They are labelled with a mixture of Arabic and Persian in which Arabic overwhelmingly dominates the technical terminology. Yet they do not appear to be mentioned or referred to in any manner in any medieval Arabic-language medical writing.

In the late nineteenth century, a similarity was noted between the stance and general subject matter of these figures and sets of anatomical illustrations that were produced in Europe in the middle of the twelfth century. The earliest extant Latin set was produced in Bavaria in 1158 at the Benedictine cloister of Prüfening near Regensburg.²⁶ It has five individual figures (veins, arteries, bones, nerves, and muscles), all viewed frontally and in a squatting position similar to the Persian figures. There is also a quite similar Bavarian manuscript written at the Benedictine monastery of Scheyern around 1240 by a Monk named Conrad.²⁷

A slightly different set was executed in England in the twelfth century, and it has been argued that the text accompanying its figures represents the original Latin archetype for the Western series.²⁸ This set contains nine rather than five illustrations, reflecting the explicitly stated aim to discuss nine systems of the body: the five usual ones, plus individual internal

²³ Newman 1998.

²⁴ Istanbul, University Library MS 4689; reproduced in Turner 1995, p. 159. A rather similar horse diagram, attributed to 16th-century Egypt, was illustrated in Riyadh 1985, pp. 70–1 item 54.

²⁵ London, Wellcome Library, MS Or. Indic delta 76 (skeleton of horse) and 78 (nerves); 77 (veins?), and 75 (arteries?).

²⁶ Munich, MS Lat. 13002, dated 1158 CE.

²⁷ Munich, MS Lat. 17403 (undated, c. 1240).

²⁸ Cambridge, Gonville & Caius, MS 190/223, fols. 2r–6r (undated, 12th c.). See O’Neill 1969 and 1977.

organs, male genitalia, female genitalia, and the optical system. A second closely related manuscript was produced in England in 1292.²⁹ Both are colourful manuscripts with five full-figure anatomical paintings, all facing frontally and in the distinctive squatting position. In the case of the manuscript made in 1292, both the colours on the figures and the background text appear to have been added later, and the surrounding text has nothing to do with the figures and does not even concern anatomy.

Of even greater significance for our purposes is a manuscript in the Provençal language produced about 1250 and now in Basel.³⁰ Of its five figures, the skeleton is especially interesting. If we compare the skeletons in both sets—Persian and Provençal—we see that they are both viewed from behind, with the head hyper-extended so that the face looks upwards and the palms of the hands face toward the observer. The feet on the Provençal skeleton, however, are drawn as if the figure is facing frontally. Both figures are in a distinctive squatting posture that is to be seen also in the other figures in both the European and the Islamic sets. Moreover, the detail of the bones and sutures of the skull are virtually identical in the Provençal skeleton with those on Islamic skeletons.

There are also two additional medieval European skeletal figures that are very similar to this Provençal skeleton. One, a fourteenth-century manuscript, is now in Munich, and the skeleton in it has virtually the same delineation of the cranial sutures on the hyper-extended head.³¹ The eyes and nose on the Munich copy are of a curious design, however, something like a proto-Mitsubishi logo. In the Munich version, however, the feet are drawn to indicate that the figure is seen from behind, while in the Provençal version that perspective is not evident in the drawing of the feet. The third example, now in the Vatican, is also from the fourteenth century and contains only three figures, one of which is the skeleton.³² In these three western skeletons, the lines demarcating the sutures have been drawn in a manner that superficially re-

sembles medieval European female headdress. Yet the details and the quite specific labels on all three examples are remarkably similar to those on the Islamic skeletons.

In the Islamic sets, the nerve figure also has its head hyper-extended and is viewed from behind, while in the preserved European sets, all the nerve figures face forward and their heads are not hyper-extended. The muscular, venous and arterial figures in the Islamic sets, however, all face toward the front, as do all the European ones.

It is evident that the skeleton clearly predated by at least 180 years the Persian treatise by Manṣūr ibn Ilyās written in 1386. And there are at least superficial similarities—particularly the distinctive posture—between the other four figures and the European drawings of the twelfth, thirteenth, and fourteenth centuries.

Unfortunately we do not know in what form, nor by what means, such full-length anatomical diagrams were available to Manṣūr ibn Ilyās working in Iran at the end of the fourteenth century. It is evident, however, that the Islamic figures either derived from a much earlier European tradition of anatomical illustration, or drew upon a source, very probably Arabic, that was common to both the Islamic and the European versions.

There are over seventy preserved sets of these five or six Islamic anatomical full-figure diagrams—about two-thirds of which are associated with the treatise by Manṣūr ibn Ilyās. The remainder of the sets circulated independently, with no accompanying text or labels, or were inserted into copies of other treatises (again, with no labels). An example of the independent circulation of these figures is the skeleton incorporated into the miscellany produced in 1413 at the Timurid court in Isfahan for Iskandar-Sultan. A number of unlabelled figures, unaccompanied by text, are recorded in various collections.³³ They also sometimes are slipped into copies of treatises other than that by Ibn Ilyās, such as a copy of the *Qānūn* of Ibn Sīnā.³⁴ The figure with the gravid uterus often circulated independently, and it is even found in a manuscript of about 1500 illustrating a Persian

²⁹ Oxford, Bodleian Library, Ashmole MS 399, fols. 18v–22v; dated 1291 CE.

³⁰ Basel, MS D.II.11 (undated, c. 1250). The skeletal figure is illustrated by French 1984, p. 158; and Sudhoff 1908, Tafel I.

³¹ Munich, MS Lat. 13042 (undated, 14th c.); see French 1984, p. 155; and Sudhoff 1908, p. 30.

³² Vatican, Palat. Lat. 1110, fol. f. For illustrations, see French 1984, p. 157; and MacKinney and Hill 1964, fig. 1.

³³ See Maddison and Savage-Smith 1997, vol. 1, pp. 22–3.

³⁴ For example, London, Wellcome Library, MS Or. Arabic 155, dated 1042 (1632), a copy of the *Qānūn* containing four of the anatomical figures.

dictionary at the entry for the word *zāhdān* meaning 'womb'.³⁵ These six squatting, highly schematic anatomical figures remained the dominant model for full-figure anatomical illustration in the Islamic world until the introduction of early modern European anatomical and artistic conventions.

The most obvious element uniting all the Western and Islamic full-figure sets is the curious squatting posture of the figures. The legs are spread apart and the arms turned down, with the elbows slightly bent. A survey of art historical and archaeological publications reveals that nearly every early or pre-literate culture has drawn or sculpted human figures in a somewhat similar posture. It might be worth noting that many of these examples come from ancient Iraq and central Asia. Perhaps equally of interest is the fact that the stance is strikingly dissimilar to that of the numerous cycladic figures of early Greek and Mediterranean culture. One theory that has been put forward by historians of anatomy is that the stance represents a body laid out for dissection. The medical historian Robert Herrlinger proposed the appellation '*mensa* figures' rather than squatting figures, from *mensa* 'the table' on which a body was laid for dissection.³⁶ However, there is no evidence of human dissection being undertaken, in either Europe or the Islamic world during the centuries in which these figures are first recorded.³⁷

Though the origin of the stance cannot be determined at this distance in time, the ubiquitous occurrence of the squatting posture in the Islamic sets, as well as the Western ones, presents undeniable and unavoidable evidence of some form of influence and transmission between East and West. The fact that considerable time elapsed between the first Western versions we have today and the earliest extant Islamic ones (some 200 years) serves as additional evidence of a connection between the sets, for the longer the interval between the appearances of the same idea, the more likely that they were transmitted rather than simultaneous or independent developments.

What purpose did these various anatomical images serve? Several of the diagrams present structures or

views that are in fact not visible at the same time—the suture diagrams, for example, and especially the thirteenth-century illustrations of the eye-brain relationship. The authors and illustrators are silent regarding this remarkable feature, but the copious labels on the diagrams make it evident to the reader. The juxtaposition of impossible views, or objects that are incorrectly oriented spatially, appears to have presented no difficulty to pre-modern societies, despite the problems it presents for us today. This is owing to the modern notion that naturalism is the normal and proper way to represent objects of study, particularly objects of scientific study—no doubt a result of the influence of logical positivism and the scientific method. At the time that these figures and diagrams were conceived and propagated, abstraction was the common method through which one interpreted nature. A highly schematic approach to human anatomy, which these represent, could serve as a reasonable *aide memoire* for the user, even though they might give an inadequate representation of the structures themselves. The diagrams showing more than one plane or level at a time, however, do more than simply organize the material in a memorable way. They supply relational and spatial information not easily provided by the text alone.

Of the full-figure diagrams, those with the hyper-extended heads (the skeleton and the nerve figure) provide both multi-layered views of the internal (or at least not superficial) structures of the head, and—like the smaller diagrams of the Arabic treatises—they provide information regarding relationships not readily available from the text. As for the remainder of the figures in the series—including the lower parts of the skeleton and the nerve figure, as well as the muscle, venous, and arterial figures—they are essentially 'list-maps'. That is, they are an anatomical equivalent of a medieval Latin 'list-map', in which the three continents on a T-O form of medieval map of the world are completely filled with text enumerating as many place-names as possible.³⁸ The muscle figure is an obvious, and rather comical, anatomical equivalent to a terrestrial text-map. The other figures also serve much the same purpose—that is to say, they

³⁵ British Library, APAC, MS Or. 3299, fol. 150r, where it illustrates the Persian glossary *Miṣṭāḥ al-fuṣṭāḥ* by Shādiyābādī.

³⁶ Herrlinger 1970, pp. 10–11.

³⁷ See Savage-Smith 1995.

³⁸ For an eleventh-century example of a T-O diagram made into a 'list-map' illustrating Bede's *De temporum ratione* (Oxford, Bodleian Library, MS Canon Misc. 560, fol. 3r), see Edson and Savage-Smith 2004, p. 31 fig. 26.

summarize text material. The exception is the sixth figure, the gravida figure, for it has no text at all.

In summary, the geometric diagrams found throughout much of the Arabic anatomical literature had an evident impact upon anatomical illustration in both medieval Europe (in brain and eye drawings) and later eastern Islamic anatomical paintings. The nature of the anatomical illustration in Arabic manuscripts is varied but dominated throughout by geometric forms, a comfortable relationship with impossible perspectives, and an abstraction that is not immediately appealing to the modern taste for naturalism.

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THE ‘TRANSLATION’ OF DIAGRAMS AND ILLUSTRATIONS FROM ARABIC INTO LATIN

Charles Burnett

Given the importance of manuscript illumination in the Islamic world, and the number of Arabic manuscripts known to Western scholars in Spain, Sicily and Southern Italy and the Crusader States from at least the late-tenth century onwards, one might expect some influence of Arab illumination on the book art of the medieval West. Local examples of such influence in religious art have been noted among Christians in the Eastern Mediterranean and in Spain.¹ In general, however, Western illuminators, although they included illustrations of Muslims, Islamic objects and so on, painted them from life, or, more commonly, within a purely Western iconographic tradition.² The lack of Arab influence may be partly due to the fact that many of the Arabic genres in which illustrations are found, such as encyclopedias and works on human geography, were not transmitted to the Latin West. While on the rare occasions when a work which is commonly illustrated in Arabic manuscripts *was* transmitted, it appears to have lost its illustrations in the course of transmission: e.g. the tales of *Kalila wa Dimna*.³ One may add that, while illustrations are

commonly found in the herbal tradition in Greek, Arabic and Latin (e.g. in the works of Dioscorides), those Arabic herbals that were translated into Latin were not illustrated.⁴

Where we do find a crossover of illustrations from Arabic into Latin is in the depiction of the heavenly constellations, and in surgery and anatomy. In the

in two of them (London, British Library Add. 11437 and Munich, Bayerische Staatsbibliothek Clm 14120) suggest that illustrations once existed or were envisaged. Of the numerous versions in European vernaculars, only two of the manuscripts of the popular Greek version are illustrated, while one manuscript of the thirteenth-century Castilian translation from the court of Alphonso X, and one manuscript of Raymond of Bézier's early-fourteenth-century version (based on the Alphonsine and John of Capua's translations) contain illustrations. None of these can be shown to derive from Arab models. The fifteenth-century German printed versions are lavishly illustrated, but again their woodcuts have no connection with Arab painting (Bodemann 1997, p. 69). I owe this information to Isabelle Dolezalek.

⁴ This is the case with the relevant books of Constantine the African's *Pantegni* (*Practica II, De gradibus*) and the *Liber regalis* of Stephen of Antioch (both based on 'Alī ibn al-'Abbās's *Kitāb Kāmil aṣ-ṣinā'a al-ṭibbīya*). More common than illustration is the prevision of synonyms in various languages for simple medicines (e.g. the *Synonyma* of Simon of Genoa: see Steinschneider 1892). The well-known lavish illustrations of the *Tacuinum sanitatis* of Ibn Buṭlān (see most recently Bovey 2005), have nothing to do with the Islamic tradition, since the Arabic manuscripts of Ibn Buṭlān are not illustrated.

¹ For book illustration in the Eastern Mediterranean Buchthal 1957, Folda 1995, and Hunt 1997. For 'Mozarabic' illustrations see Williams 1994–2003, I, pp. 143–57.

² See Mellinkoff 1993, and Luchitskaya 2000.

³ None of the four surviving manuscripts of John of Capua's version of the tales is illustrated, though rubrics

first case, the figurative depictions of the constellations (*suwar*) as mirrored images (as seen from within and from outside the celestial sphere respectively), by Abu'l-Ḥusayn al-Šūfī, left its mark on manuscripts belonging to a Latin Sufi tradition.⁵ In the case of surgery, we have the fine example of Gerard of Cremona's Latin translation of the *Book of Surgery* of Abu'l-Qāsim az-Zahrāwī, in which numerous surgical instruments (forceps for extracting dead embryos, racks for stretching bodies and so on) are faithfully copied from the detailed depictions of the Arabic original.⁶

What I would like to concentrate on in this paper, however, are some less picturesque instances where we can see that a Latin translator has been faced with an illustration or diagram in an Arabic manuscript, and has made some decision on how to 'translate' it into his Latin text. First I would like to look at some manuscripts of the translations made by Hugo of Santalla, a translator working in Tarazona in the mid-twelfth century; for, in this case we are lucky enough to know where he got his Arabic texts from (the library of the Banū Hūd, the former kings of Islamic Zaragoza, in Rueda Jalón), and we have some copies of his translations which are very close in time to their original composition.⁷ In a text on weather forecasting known as the *Liber imbrum* of 'Jafar' we find in the margin of the earliest manuscript references to five tables illustrating the text: [184] 'prima tabula huic debetur distinctioni' ('the first table is needed for this chapter'); [195] 'huic capitulo supponitur secunda tabula' ('the second table belongs to this chapter'); [204] 'huic quoque tractatui tertia subservit tabula' ('the third table serves this chapter'); [217] 'hic quarta tabula necessaria est' ('the fourth table is needed here'); and [236] '<hic> quoque subscripta est in Arabico tabula quinta' ('a fifth table too has been added below <the text> here in the Arabic').⁸ The style of these marginalia is that of

Hugo himself,⁹ and the last *marginale* makes it clear that he is reading the tables in his Arabic manuscript (unfortunately, we do not have a manuscript of the Arabic text). The context shows that the tables were meant, respectively, to demonstrate the compass direction of the winds; to tabulate the indications of planets and lunar mansions in regard to sieges, the prices of commodities, and the outcome of journeys; and to illustrate the mansions whose 'lines do not join'. None of these tables appear adjacent to the relevant texts in the Latin manuscripts, but it is possible that Hugo's instructions refer to a separate fascicle which contains these tables and which might have been prepared in a different campaign from that of the continuous text. Evidence for this is the separately-occurring diagram found on the last page of a twelfth-century codex within MS Cambrai, Mediathèque municipale 168, fol. 106v (Fig. A), which is headed 'figura .28. mansionum Lune libri ymbrium Jafar superioris etc.' For this figure is specifically described as belonging to the *Liber imbrum* (whose incipit is given), although the *Liber imbrum* does not occur in the manuscript itself.¹⁰

The illustration in the Cambrai manuscript shows, among other things, the asterisms of the lunar mansions (the 27 or 28 divisions of the ecliptic circle marked out by the Moon's course in a sidereal month). In the case of the lunar mansions we can be sure that there is no contamination from a Western tradition, since lunar mansions were not used by Latin and Greek astronomers of the Classical period. In this way they differ from the constellations and signs of the zodiac in which it is difficult to disentangle the different traditions. However, unlike the Classical constellations, they are rarely depicted figuratively, and the meagre examples that we have in Arab works of figurative representations do not match the *written* descriptions of their figures in the one medieval Greek text (MS Oxford, Cromwell 12).¹¹ Instead,

⁵ Drawings of the constellations in al-Šūfī's style can be found in Paris, Bibliothèque de l'Arsenal, 1036 and its derivatives (see Kunitzsch 1986, pp. 68–9). See also the article by Moya Carey in this volume.

⁶ Irlich 1982 (with 8 illustrations). For anatomy see the article by Emilie Savage-Smith in this volume.

⁷ See Haskins 1927, pp. 67–81 and Burnett 2005.

⁸ The text is edited in Burnett 2004, pp. 87–116. The sentence numbers of this text are given in square brackets.

⁹ One characteristic of this style is the use of synonyms; here 'distinctio', 'capitulum' and 'tractatus' are all equivalents, presumably, of the single Arabic word 'bāb' ('chapter').

¹⁰ This illustration cannot, however, be one of the five tables mentioned above.

¹¹ This text is edited by Weinstock 1951, pp. 141–56. Arab figurative illustrations of the lunar mansions are found in MSS Oxford, Bodleian Library, Or. 133, fol. 27v, Paris, Bibliothèque nationale de France, Suppl. ture 242,

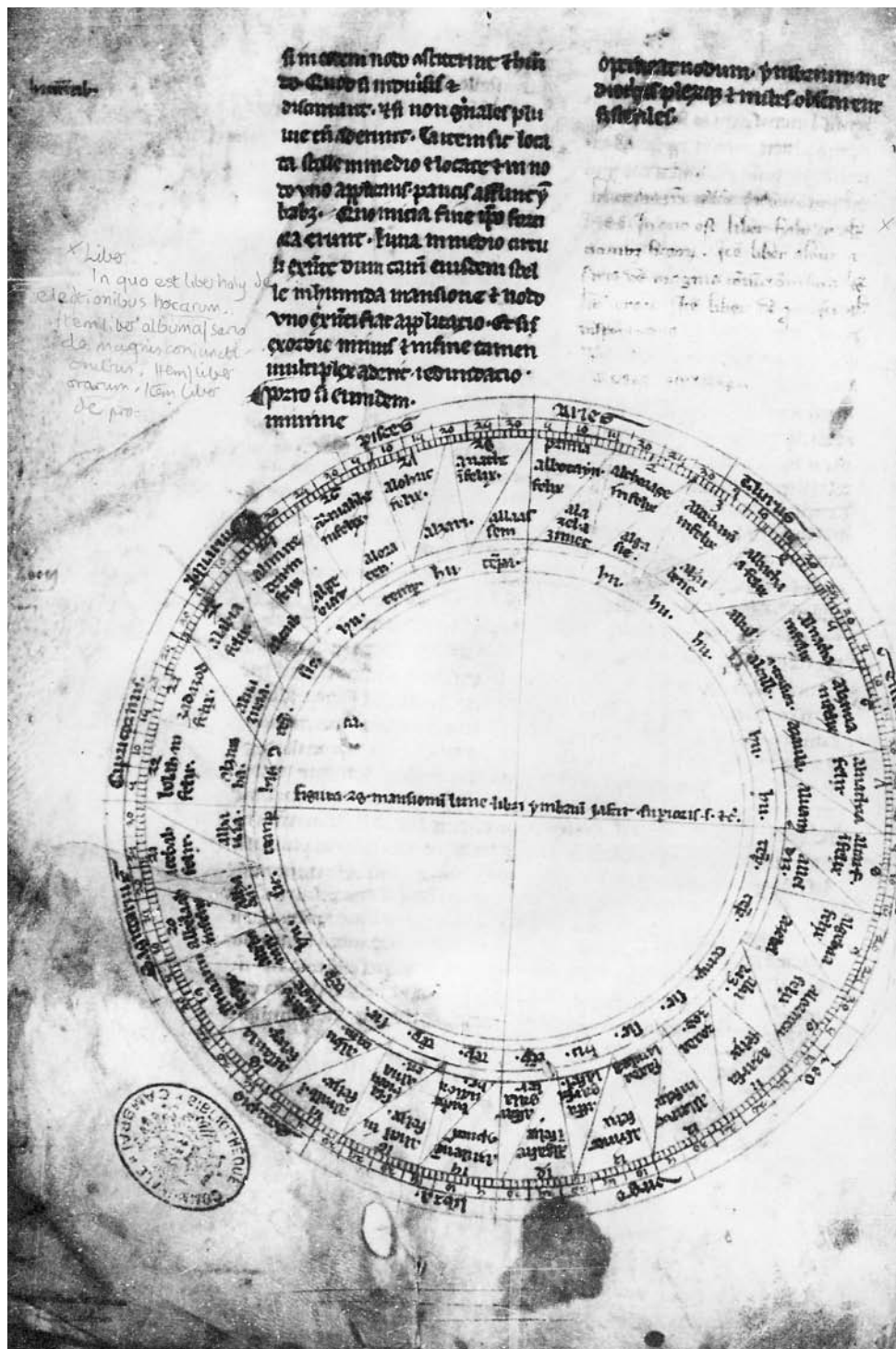


Fig. A. A rota of the 28 lunar mansions. Hugo of Santalla, *Liber imbrum*. Cambrai, Mediatheque municipale 168, 12th century, fol. 106v (Courtesy of the Mediatheque municipale).

they are shown as groups of stars ('asterisms') of different sizes and in different arrangements. These asterisms are frequently found in Arabic manuscripts and are copied, more or less accurately, into Latin manuscripts, often within the text itself (Fig. B).¹²

Hugo of Santalla confronted other Arabic manuscripts with diagrams. He translated a text on how to use astronomical tables by Ibn al-Muthannā. Again, we do not have the Arabic original. Nevertheless, it is clear from the Latin tables that the Arabic manuscript must have been written with Hindu-Arabic numerals of the kind found in the East—i.e. it was most likely a manuscript brought to al-Andalus from Baghdad, or elsewhere in the Central or Eastern part of the Islamic realm. When one looks at the two early Latin manuscripts of these tables—Oxford, Bodleian, Arch. Seld. B 34 and Cambridge, Caius College 456—one notices a curious thing: the same tables occur in both manuscripts, but the numerals are written as mirror images to each other (Fig. C). In the Caius College manuscript, the scribe, who appears to be English, has reversed the order of the numerals and the direction they face. In the Bodleian manuscript, however, the numerals are written correctly and confidently.¹³ But it must be noted that the tables have been *added* to this latter manuscript in a hand different from that of the main text (just as, perhaps, the missing tables in the weather-forecasting text had been written separately). We may assume that the person who added these tables was competent in handling the newfangled Indian numerals, and could perhaps have been copying the tables directly from an Arabic exemplar.

Hugo provides other examples of diagrams. He was the first, it seems, to have translated from Arabic a text on geomancy, the term he invented for the *ʿilm al-ramal* ('the science of sand'), which involved randomly casting dots on the ground, or on a piece of parchment, and constructing geomantic figures of

four lines with one or two dots in each of them.¹⁴ These geomantic figures can be found in numerous Arabic and Latin manuscripts and present no difficulties in 'translating' from one to another, especially since they do not have 'directionality' (their mirror images are the same as themselves). (Fig. D).

The most elaborate diagram reproduced by Hugo, however, is in his translations of two works on another divinatory science: scapulimancy, or divination by sheep's shoulder-blades. In this case, unfortunately, we do not have any early manuscripts of Hugo's translation, and the only copy with an illustration is a fifteenth-century manuscript from the Bibliothèque nationale de France (Paris, BNF, lat. 4161) which provides a rather schematic diagram of a shoulder-blade. When we consult other Arabic and Latin manuscripts we realise that the figure can itself serve as the 'text'. In two Arabic manuscripts this diagram precedes a text on scapulimancy that is attributed to Hermes and al-Kindī, where it is described as a *'sura'*—a pictorial representation—of the shoulder-blade'.¹⁵ A similar illustration appears in an anonymous Latin translation of a text on scapulimancy (Fig. E). Many of the differences between the Arabic texts on scapulimancy and the various Latin versions can be explained as being caused by the parts of the shoulder-blade being described in different sequences. We can consider the diagram of the shoulder-blade as being the original document (apparently described as a *ṣahīfa* in the Arabic texts, and a *carta* in the Latin), and different diviners explain the significance of its parts in different sequences.¹⁶

Hugo of Santalla devoted most of his energy to translating works attributed to Hermes Trismegistus in Arabic—i.e. works of magic and divination, and this field, as I have shown, is particularly rich in regard to diagrams and illustrations. I could mention just briefly the magic squares and 'characteres' of the planets. (Fig. F) For the magic to work one had to

fol. 35v–36r, and on the back of an astrolabe by 'Abd al-Karsīm al-Miṣrī (1227–8 CE) in the Museum of the History of Science, Oxford (inv. no. 37148), illustrated in Ackermann 2004 (figs. 2, 3, 5, 6 and 8).

¹² The variety of ways in which the lunar mansions are depicted on Arab astrolabes (which reflects the manuscript tradition) is described and illustrated in Ackermann 2004.

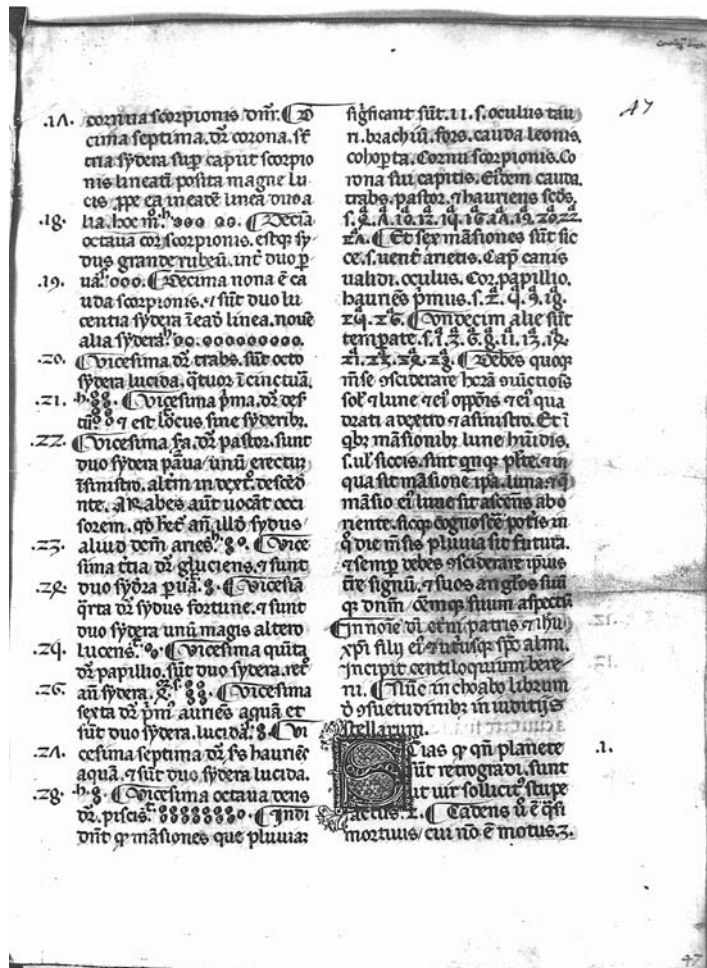
¹³ See Burnett 2002a, pp. 246–7.

¹⁴ Charmasson 1980 and Charmasson 2001.

¹⁵ See al-Kindī 2001, with illustrations of the shoulder-blade in Arabic and Latin manuscripts, on pp. 338–41.

¹⁶ This may be the significance of the phrase at the beginning of the anonymous Latin translation: 'incipiam adiutorio Dei de ratione spatule ex modo spatule' ('I shall begin with the help of God to describe how to understand the shoulder-blade from the form of the blade'); Oxford, Bodleian Library, MS Canon. Misc. 396, fol. 108r.

فِيمَا أُجِبَتْ مِنْ جَرِيدِ ثِيَابِكَ فَإِنَّ ذَلِكَ لَهُ مَحْمُودُ الْعَاقِبَةِ
 تَابِي الْبَرَكَةِ قَالَ وَمَنْ وَلَدَ فِي هَذَا السَّوْمَانِ كَانَ ذَكَرًا
 وَأُنْثَى كَانَ سَعْدًا مَيُونًا مَحْبُوبًا حَسَنَ السَّيَرَةِ مَسْتُورَ
 الْحِجَابِ الشَّوْكَ مَاتَةً مُتَزَجَّةً بِالنَّارِ سَعْدٌ مُضْرُوبَةٌ
 يَخْبِئُ فَإِذَا تَرَلَّ الْقَمَرُ بِالشَّوْكَ فَأَعْمَلْ فِيهِ نِيرَاجَاتٍ عَقْدَ النُّهُونِ



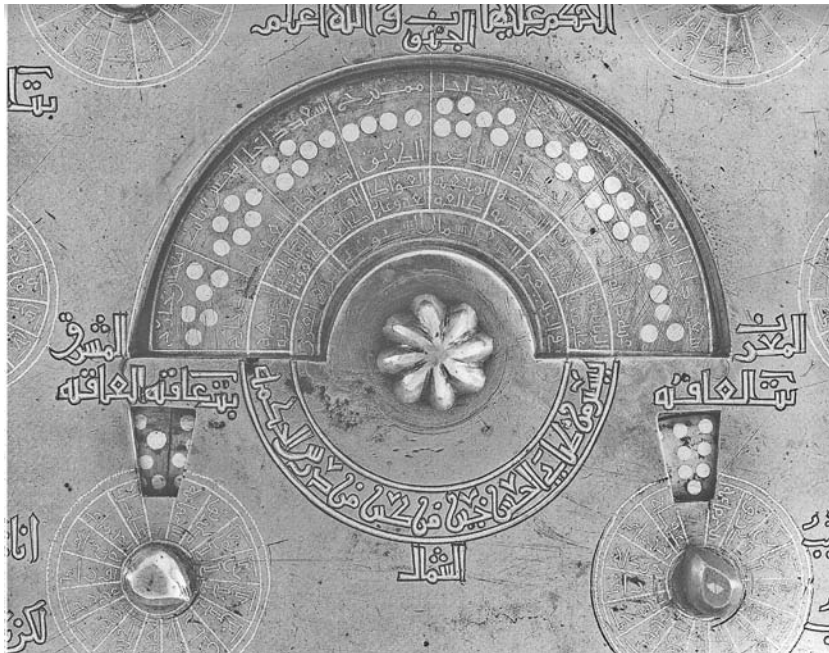


Fig. D. Geomantic figures in a) an Islamic geomantic dial in the British Museum, Department of Oriental Antiquities, Inv. No. 188.5–26.1 (see E. Savage-Smith and M. B. Smith, ‘Islamic Geomancy and a Thirteenth-Century Divinatory Device’, *UCLA Studies in Near Eastern Culture and Society*, 2, Lancaster, CA, 1980) and b) Paris, Bibliothèque nationale de France, lat. 7316A, fol.138r (Charmasson 2001, p. 371).

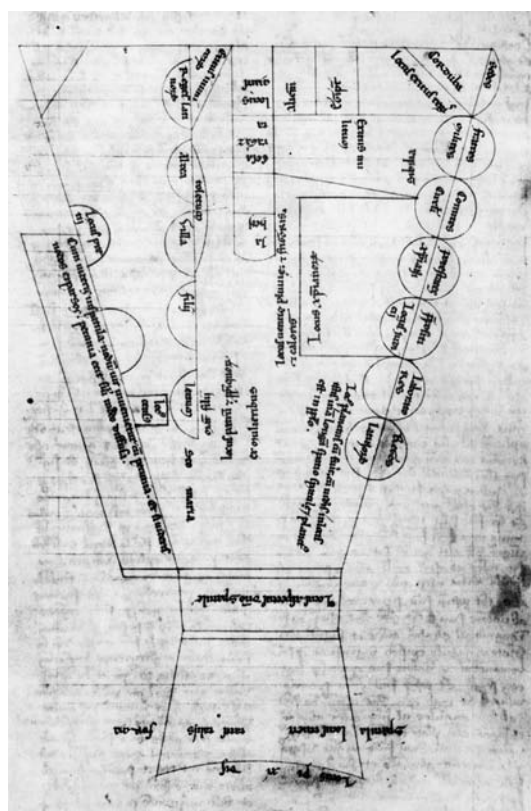
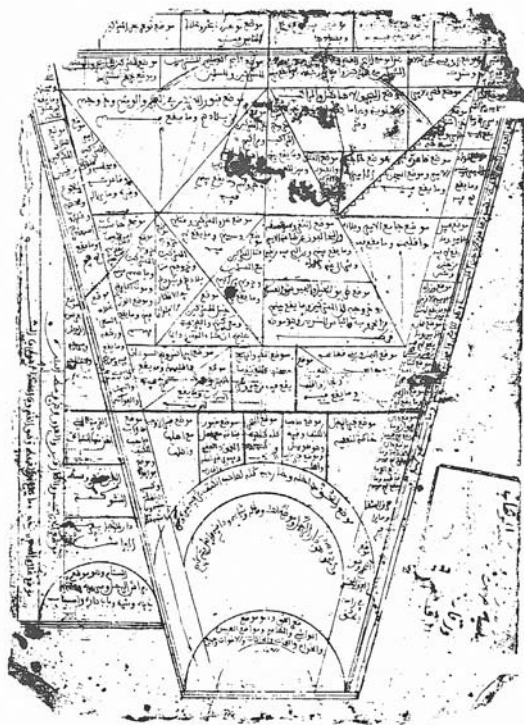


Fig. E. A shoulder blade with places marked on it in a) Tunis, Bibliothèque Nationale, 18848 (Courtesy of the Bibliothèque Nationale, Tunis), and b) Oxford, Bodleian Library, Canon. Misc. 386, 13th century, fol. 112r (within anon., *Rememoratio spatule*) (Courtesy of the Bodleian Library).

reproduce these planetary *characteres* very carefully.¹⁷ But there were other, more academic, disciplines, in which diagrams had also to be reproduced accurately, namely geometry and astronomy. In the case of Euclid's *Elements*, and other texts of Euclidian geometry, the diagrams are essential.¹⁸

Latin scribes had experience of drawing simple geometrical figures, partly because the enunciations of books 1–4 of the *Elements* had already been translated into Latin by Boethius in the sixth century. But when they confronted the full text of the *Elements* in Arabic they were faced with bigger challenges than ever before: namely, the problem of drawing precisely the three-dimensional figures that are the subject of later books of the *Elements*. In Latin cosmological works before the period of Arabic-Latin translations we see some attempts at portraying three-dimensionality but they are not mathematically accurate. The three-dimensional diagrams in the Arabic-Latin translations of Euclid, Theodosius's *De sphaera* and other geometrical works may, in fact, be the earliest accurate depictions of three-dimensional objects in the Latin West. (Fig. G) In most cases the Latin translators attempt to follow not only the lines of the original text, but also the Arabic lettering of the points.¹⁹ Thus, the Latin follows the Arabic alphabetical order 'a, b, g, d' etc. rather than the Latin order. The earliest Latin version made from the Arabic, that known as 'Adelard I', goes as far as to spell out the letters 'aliph' 'dheh' etc. We also find examples of the picturesque Arabic names of the more distinctive of the geometrical constructions: e.g. 'dhu al-qarnayn' ('the possessor of two horns') for the Pythagoras theorem. Finally, one should note that occasionally a translator *reverses* the diagrams, just as he reverses the Arabic text from right to left to left to right (as we have seen in the case of the Caius manuscript of Hugo of Santalla's translation of Ibn al-Muthannā). This occurs consistently in a translation of a version of the first four books of Ptolemy's *Almagest* that includes theorems from

Euclid's *Elements*: namely, the one in MS Dresden, Landesbibliothek, Db. 87.²⁰

In regard to astronomical instruments, we find a wide variety of astrolabes, quadrants, sundials and so on, and their parts depicted in Latin translations of Arabic texts. One astrolabe has been drawn so accurately that we believe the scribe was copying it from life: one can even see the cartouche with the maker's name in it,²¹ but even in the common cases where drawings are taken from Arabic texts, the draftsmanship can be of high quality (reflecting the quality of the original). (Fig. H)

Further diagrams appear in the works on the science of the stars. A rich source for study here would be the various Arabic-Latin translations of Ptolemy's *Almagest*, whose first books include many diagrams. But, unfortunately, only books VII, 5–VIII (containing the star catalogue) have been studied in detail.²² I would, instead, like to end with some observations on a work of astrology that was translated probably in the second quarter of the twelfth century, and revised with reference to an Arabic text, in Toledo. This is the *Great Conjunctions* of Abū Ma'shar, of which several manuscripts exist in Arabic and Latin.²³ Because of the number of manuscripts, we are, in fact, able to relate the original Latin translation to one branch of the Arabic tradition, and the revision to another. This can be demonstrated most clearly from the different ways in which the horoscopes are set up. Towards the end of the text (book 8, chapter 2) there are three horoscopes showing the position of the heavenly bodies at significant times for Islamic history. A horoscopic chart basically correlates the local situation of the heavens (the twelve astrological 'places' starting with the point of the ecliptic—the Sun's course—rising on the horizon) with the 12 divisions of the zodiac, and shows where the planets, and other significant elements, are situated. There are various methods of 'domification' (the correlation of 'places' and 'signs') and of setting out the results,²⁴ but it is curious to note that two different ways are exemplified in the Latin versions of the *Great Conjunctions*,

¹⁷ I have explored the problems of the necessity of accurate transmission of magical *characteres* and words in Burnett 2002b. For the subject as a whole see Grévin and Veronese 2004.

¹⁸ See De Young 2005.

¹⁹ Kunitzsch 1991/2.

²⁰ For this translation see Burnett 2003.

²¹ Kunitzsch 1998.

²² Ptolemy 1986–91.

²³ See Abū Ma'shar 2000.

²⁴ These are described in North 1986.

زحل المشتري المريخ الشمس الزهرة عطارد القمر
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 واذ قد ذكرنا ذلك فانا الآن آخذ في صور الكواكب على ما نقلناه

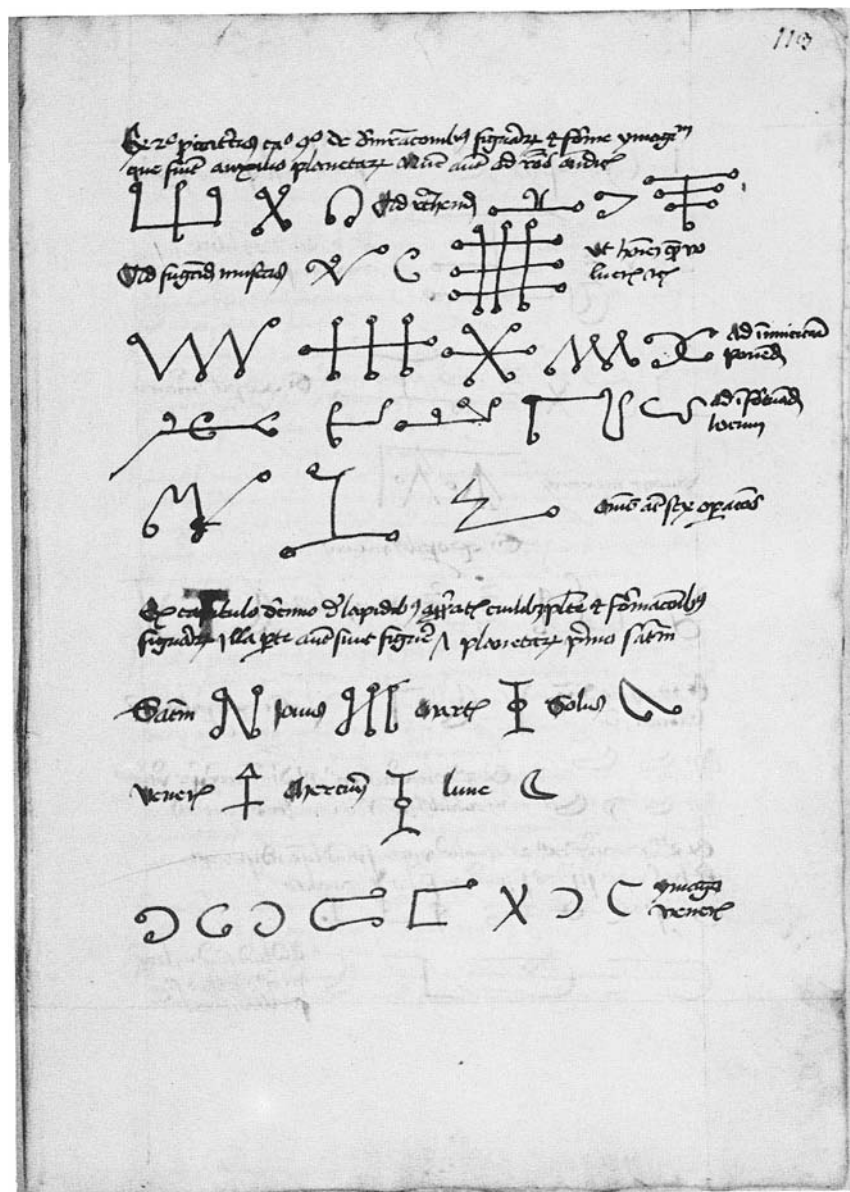


Fig. F. *Characteres* of the seven planets in a) Pseudo-Magriti, *Ghāyat al-hakīm* (*Das Ziel des Weisen*), ed. H. Ritter, Leipzig, 1933, p. 107, and b) in Vienna, Österreichische Nationalbibliothek, 3317, fol. 113 (reproduced in *Picatrix: The Latin Version*, ed. D. Pingree, London, 1986, Plate 1) (Courtesy of the Österreichische Nationalbibliothek).

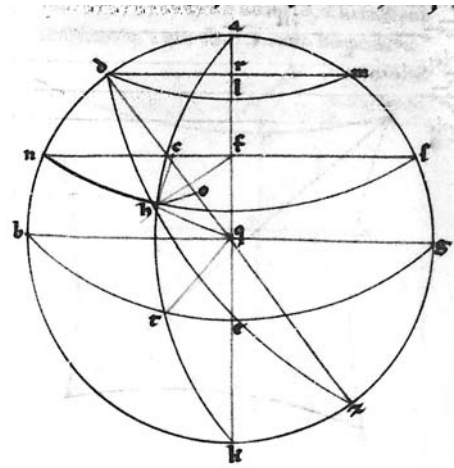
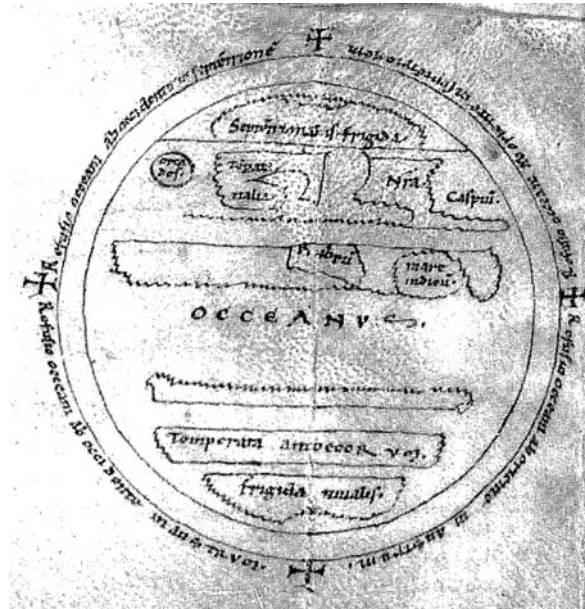


Fig. G. The depiction of bands on a sphere in a) Turin, Biblioteca Nazionale, D.V.38, fol. 84r (reproduced in I. Caiazzo, *Lectures médiévales de Macrobie*, Paris, 2002, p. 96) and b) Paris, Bibliothèque nationale de France, lat. 9335, fol. 7v (within Theodosius, *De spheris*) (Courtesy of Ministero per i Beni e le Attività Culturali, Biblioteca Nazionale Universitaria di Torino).

and moreover, that these ways correspond to two different ways found in the Arabic manuscripts.

The first version matches the relatively simple construction in the Escorial manuscript (Biblioteca real 937), in which the date of the casting of the horoscope is put into the central box, and the twelve places are boxes or triangles. (Fig. I) The revised version adopts a different structure, entirely of triangles, which may be of his own devising, but more significantly, a grid is added within which the Latin reviser writes: 'the names of the planets should be placed here' and 'the mean motions and the positions should be placed here'.²⁵ In the Tehran manuscript of the work (Malik 3106) we have precisely the same grid, this time with the values filled in. (Fig. L) Moreover, we know why the Latin reviser did not copy these values, for he says in a gloss 'I did not translate the <values of the planets> because they were all corrupt: nor did I put anything in their place'.²⁶

These examples show that Latin translators took care with the diagrams that they found in their Arabic originals. Sometimes, they may have copied them on separate sheets (with the requisite instruments), at other times, they may have adapted them to the Latin context. Occasionally, they may have omitted them as being irrelevant or unreliable. Their approach is entirely practical: to consider what would be most clear and useful for their audiences. For the translators, aesthetic considerations hardly come into play. But we might learn something also from the point of view of art history by considering some of the examples I have given, such as the degree of realism and the possible influence of Islamic aesthetics in the way that medical or astronomical instruments are depicted, and the effect of the practice of drawing three-dimensional figures to illustrate geometrical or astronomical theorems on perspective in painting.

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²⁵ 'Nomina planetarum debent hic poni; medii cursus et positiones debent hic poni': Abū Ma'sar 2000, II, p. 334.

²⁶ '...quia corrupta erant omnia, ideo non transtuli, nec aliquid ibi posui': Abū Ma'sar 2000, II, p. 332.

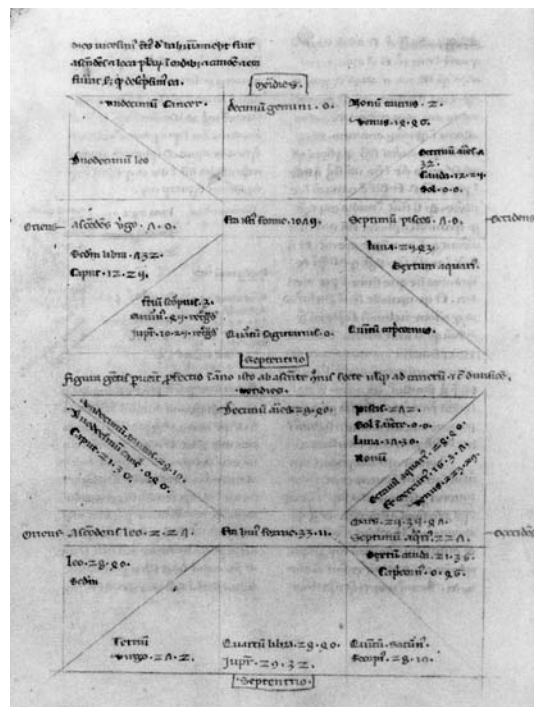


Fig. I. Horoscopic diagrams within Abū Ma'shar, *Great Conjunctions*, in a) Escorial, Biblioteca real 937, fol. 84v (Courtesy of the Escorial) and b) Vienna, Österreichische Nationalbibliothek, 5478, dated 1248, fol. 175v (Courtesy of the Österreichische Nationalbibliothek).

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What follows is designed to serve as a compact introduction to the literature on Arab painting and thereby provide the general scholarly background to the subject matter dealt with in a more specialized way in the present work. Accordingly, it omits studies on specific texts or manuscripts. Also, given the concentration on illustrated manuscripts other media have been excluded: for these appropriate references can readily be found in the works on Arab art cited below. Although not always directly concerned with the relationship between text and illustration, a section containing a select list of exhibition and collection catalogues has been added in order to provide a wider survey of the repertoire of images that survive.

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ILLUSTRATIONS



Fig. 1. The Palmer Cup, clear glass, gold and enamels. Probably Syria, 13th century. London, British Museum, The Watson Bequest, no. 53 (Height 13 cm) (Courtesy of the British Museum)



Fig. 2. The Hedgehog. Ibn Bakhūshū, *Kitāb na'ī al-ḥayawān*, North Jazīra? ca. 1220–25. London, British Library, Or. 2784, fol. 202r (125 × 150 mm) (Copyright of the British Library)



Fig. 3. The Bustard. Ibn Bakhūshū, *Kutāb na'ī al-hayawan*, Jazīra? ca. 1220–25. London, British Library, Or. 2784, fol. 228v (110 × 135 mm) (Copyright of the British Library)



Fig. 4. The Magpie. Ibn Bakhūshū, *Kitāb na'ī al-ḥayawān*, North Jazīra? ca. 1220–25. London, British Library, Or. 2784, fol. 44v (110 × 135 mm) (Copyright of the British Library)



Fig. 5. The Unicorn. Ibn Bakhūshū, *Kitāb na'ī al-hayawān*, North Jazīra? ca. 1220–25. London, British Library, Or. 2784, fol. 197v (120 × 135 mm) (Copyright of the British Library)

[JACLYNNE KERNER]



Fig. 1. Portraits of the physicians Mārīnūs, Andromachus the Elder, and Andromachus the Younger. Pseudo-Galen, *Kitāb al-diryāq*, Jazīra, dated 595 (1199). Paris, Bibliothèque nationale de France, *arabe* 2964, p. 34 (365 × 275 mm) (Courtesy of the Bibliothèque nationale de France)



Fig. 2. Title page with nine physicians' portraits. Pseudo-Galen, *Kitāb al-diryāq*, Jazīra, ca. 1250. Vienna, Österreichische Nationalbibliothek, A.F. 10, fol. 3v (365 × 280 mm) (Courtesy of the Österreichische Nationalbibliothek)



Fig. 3. Text page with summary chronology of the ancient physicians. Pseudo-Galen, *Kiṭāb al-diryāq*, Jazīra, dated 595 (1199). Paris, Bibliothèque nationale de France, *arabe* 2964, p. 24 (365 × 275 mm) (Courtesy of the Bibliothèque nationale de France)

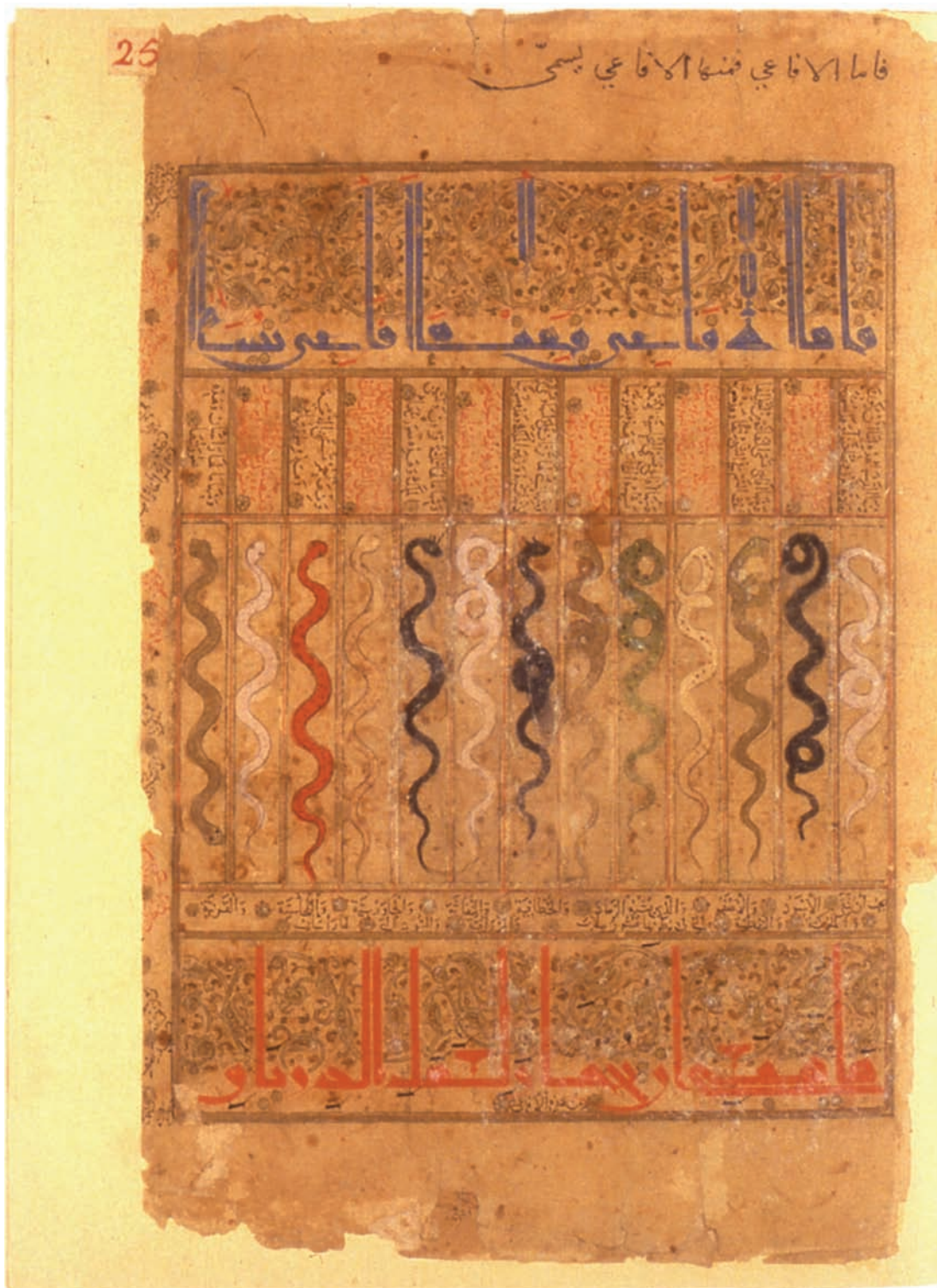


Fig. 4. Thirteen varieties of theriacal serpents. Pseudo-Galen, *Kitāb al-diryāq*, Jazīra, dated 595 (1199). Paris, Bibliothèque nationale de France, *arabe* 2964, p. 25 (365 × 275 mm) (Courtesy of the Bibliothèque nationale de France)



Fig. 5. The preparation of the theriac of Aflāgūras. Pseudo-Galen, *Kūlāb al-diryāq*, Jazīra, dated 595 (1199). Paris, Bibliothèque nationale de France, *arabe* 2964, p. 15 (365 × 275 mm) (Courtesy of the Bibliothèque nationale de France)



Fig. 6. The preparation of the theriac of Aflāgūras. Pseudo-Galen, *Kitāb al-diryāq*, Jazīra, ca. 1250. Vienna, Österreichische Nationalbibliothek, A.F. 10, fol. 9r (365 × 280 mm) (Courtesy of the Österreichische Nationalbibliothek)



Fig. 7. Andromachus the Elder learns of the efficacy of laurel berries as an antidote to snakebite. Pseudo-Galen, *Kūlāb al-diryāq*, Jazīra, dated 595 (1199). Paris, Bibliothèque nationale de France, arabe 2964, p. 19 (365 × 275 mm) (Courtesy of the Bibliothèque nationale de France)



Fig. 8. Andromachus the Elder learns of the efficacy of laurel berries as an antidote to snakebite. Pseudo-Galen, *Kitāb al-diryāq*, Jazīra, ca. 1250. Vienna, Österreichische Nationalbibliothek, A.F. 10, fol. 4v (365 × 280 mm) (Courtesy of the Österreichische Nationalbibliothek)



Fig. 9. Andromachus the Younger learns of the efficacy of snake-tainted wine as a cure for elephantiasis. Pseudo-Galen, *Kitāb al-diryāq*, Jazīra, dated 595 (1199). Paris, Bibliothèque nationale de France, arabe 2964, p. 22 (365 × 275 mm) (Courtesy of the Bibliothèque nationale de France)



Fig. 1. Spotted Arum. Dioscorides, *De Materia Medica*, dated 512 CE. Austrian National Library, Vienna, *Codex Vindobonensis Medicus Graecus I* (Juliana Anicia codex), fol. 98r (Courtesy of the Nationalbibliothek, Vienna)

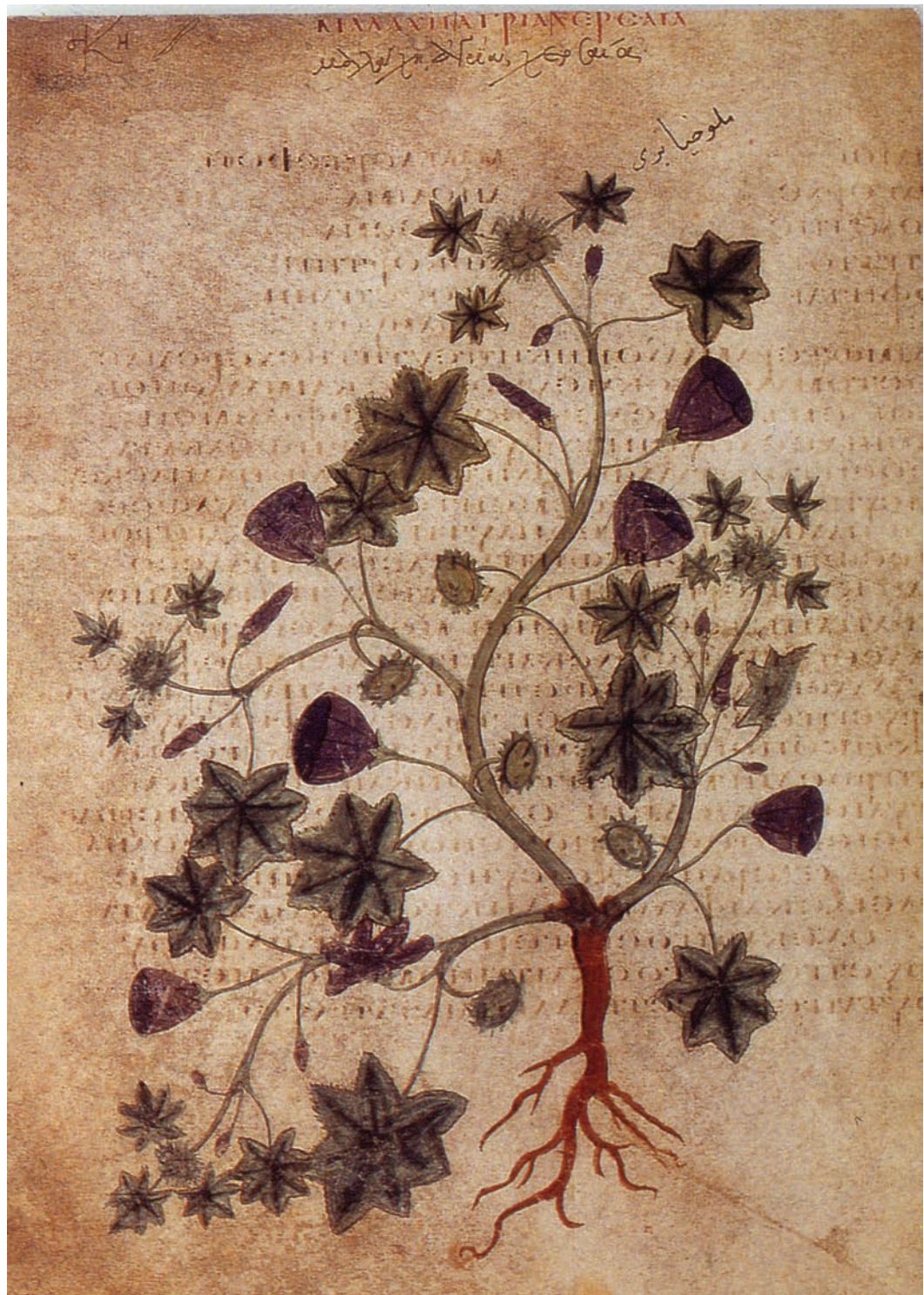


Fig. 2. Antirrhinum. Dioscorides, *De Materia Medica*, dated 512 CE. Austrian National Library, Vienna, *Codex Vindobonensis Medicus Graecus I* (Juliana Anicia codex), fol. 159v (Courtesy of the Nationalbibliothek, Vienna)



Fig. 3. Mallow. Dioscorides, *De Materia Medica*, dated 512 CE. Austrian National Library, Vienna, *Codex Vindobonensis Medicus Graecus I* (Juliana Anicia codex), fol. 228v (Courtesy of the Nationalbibliothek, Vienna)



Fig. 4. Purple betony. Dioscorides, *Kutab khawass al-ashjar* (*De Materia Medica*), dated 621 (1224), Baghdad or North Jazira, recto (detached leaf). Cambridge, Mass., Harvard University Art Museums, Arthur M. Sackler Museum, Bequest of Abby Aldrich Rockefeller, 1960.193 (Courtesy of the Harvard University Art Museums)



Fig. 5. The Plant Atraghalus combined with a hunting scene. Dioscorides, *Kitāb khawāṣṣ al-ashjār* (*De Materia Medica*), dated 621 (1224), Baghdad or North Jazīra. Istanbul, Süleymaniye Library, MS. 3703, fol. 29r (Courtesy of the Süleymaniye Library)



Fig. 6. Reseda. Dioscorides, *Kitāb khawāṣṣ al-ashjār* (*De Materia Medica*), dated 621 (1224). Baghdad or North Jazīra. Istanbul, Süleymaniye Library, MS. 3703, fol. 82r (Courtesy of the Süleymaniye Library)



Fig. 7. Couch grass. Dioscorides, *Kitāb khawāṣṣ al-ashjār* (*De Materia Medica*), dated 621 (1224). Baghdad or North Jazīra. Istanbul, Süleymaniye Library, MS. 3703, fol. 15v (Courtesy of the Süleymaniye Library)



Fig. 8. Gladiolus. Dioscorides, *Kitāb khawāṣṣ al-ashjār* (*De Materia Medica*), dated 621 (1224). Baghdad or North Jazīra. Istanbul, Süleymaniye Library, MS. 3703, fol. 12v (Courtesy of the Süleymaniye Library)



Fig. 9. Iris or Orris Root (*īrā*) and the White Garden Lily (*al-sūsān al-abyad*) with their roots. *Kitāb-i ḥashā'ish* (The Book of Herbs), a Persian translation by Ghiyāth al-Dīn Muḥammad-i Rāḡavī, of the Arabic translation of Dioscorides by Ishāq ibn Ḥunayn, probably Isfāhan, dated Jumādā II 1068 (March 1658). St. Petersburg, Russian Academy of Sciences, MS. no. D-143, fol. 36r (Courtesy of the Russian Academy of Sciences)



Fig. 10. A form of sorrel (*bint al-hammād*); Mustard (*al-khardal al-bustānī*); Wild Mustard (*al-khardal al-barī*). The tulip is not labelled and is evidently for decoration, a Persian translation by Ghiyāth al-Dīn Muḥammad-i Raḡavī, of the Arabic translation of Dioscorides by Iṣḥāq ibn Ḥunayn, probably Isfāhān, dated Jumādā II 1068 (March 1658). St. Petersburg, Russian Academy of Sciences, MS. no. D-143, fol.79r (Courtesy of the Russian Academy of Sciences)



Fig. 1. The Giraffe. Ibn Bakhtīshū', *Kitāb manāfi' al-hayawān*, Marāgha (Iran), dated between 1295 and 1299. New York, Pierpont Morgan Library, M 500, fol. 16r (205 × 140 mm) (Courtesy of the Pierpont Morgan Library)

Fig. 1. Cepheus. 'Abd al-Rahmān al-Šūfī, *Kūlāb šuwar al-kawākib al-thābila*, probably Marāgha (Iran), between 1260 and 1280. London, British Library, Or.5323, fol. 12r (folio 210 × 270mm) (Copyright of the British Library)



Fig. 2. Perseus. 'Abd al-Raḥmān al-Sūfī, *Kutāb suwar al-kawākib al-thābita*, probably Marāgha (Iran), between 1260 and 1280. London, British Library, Or.5323, fol. 21v (folio 210 × 270mm) (Copyright of the British Library)



Fig. 3. Bootes. ‘Abd al-Rahmān al-Šūfī, *Kūtāb ṣuwar al-kawākib al-thābita*, probably Marāgha (Iran), between 1260 and 1280. London, British Library, Or.5323, fol. 13v. (Copyright of the British Library). Pseudo-Galen, *Kūtāb al-diryāq*, mid 13th century, northern Iraq. Vienna, Nationalbibliothek, A.F.10, fol. 15v (folio 210 × 270mm) (Copyright of Nationalbibliothek Vienna. Reproduced from Brandenburg 1982)



Fig. 4. Pegasus. 'Abd al-Rahmān al-Šūfī, *Kūtab suwar al-kawākib al-thābita*, probably Marāgha (Iran), between 1260 and 1280. London, British Library, Or.5323, fol. 30v (folio 210 × 270mm) (Copyright of the British Library)



Fig. 5. Ceramic bowl, lustre. Kāshān, late 12th century. New York, Metropolitan Museum, Rogers Fund 1916
(Copyright of the Metropolitan Museum. Reproduced from Welch 1987, p. 36)



Fig. 6. Draco. 'Abd al-Rahmān al-Sūfī, *Kitāb ṣuwar al-kawākib al-thābila*, probably Marāgha (Iran), between 1260 and 1280. London, British Library, Or.5323, fol. 11v (folio 210 × 270mm) (Copyright of the British Library)



Fig. 7. Door-handle, brass. Ulu Cami, Cizre (Turkey), early 13th century. Copenhagen, David Collection, 38/1973
(Copyright of The David Collection, photograph taken by Pernille Klemp. Reproduced from von Folsach 2001)



Fig. 8. Leo. 'Abd al-Raḥmān al-Šūfī, *Kitāb suwar al-kawākib al-thābita*, probably Marāgha (Iran), between 1260 and 1280. London, British Library, Or.5323, fol. 45v (folio 210 × 270mm) (Copyright of the British Library). Top right: Celestial globe, brass, probably ca. 1288, Marāgha (Iran). Dresden, Mathematisch-Physikalischer Salon, E.II.1 (Copyright of Mathematisch-Physikalischer Salon Dresden, photograph courtesy of Dr Wolfram Dolz). Bottom right: Celestial globe, brass, dated 684 (1285-86), Marāgha (Iran). London, Khalili Collection, SCI 21 (Copyright, The Nour Foundation, courtesy The Khalili Family Trust)



Fig. 9. Auriga. Celestial globe, brass, dated 674 (1275-76), probably Marāgha (Iran). London, British Museum, OA 71.3.1 (Reproduced from Dorn 1830, pl.1). Celestial globe, brass, dated 684 (1285-86), Marāgha (Iran). London, Khalili Collection, SCI 21 (Copyright, The Nour Foundation, courtesy The Khalili Family Trust). Celestial globe, brass, probably c. 1288, Marāgha (Iran). Dresden, Mathematisch-Physikalischer Salon, E.II.1 (Copyright of Mathematisch-Physikalischer Salon Dresden, photograph courtesy of Dr Wolfram Dolz)



Fig. 1. The Horned Horse, with the colophon below. Qazwīnī, *ʿAjāʾib al-makhlūqāt wa-gharāʾib al-mawjūdāt*. Fars, 722 (1322). Istanbul, Süleymaniye Library, Yeni Cami 813, fol. 181v (Courtesy of the Süleymaniye Library)



Fig. 2. Frontispiece. Qazwīnī, *ʿAjāʾib al-makhlūqāt wa-gharāʾib al-mawjūdāt*. Fars, 722 (1322). Istanbul, Süleymaniye Library, Yeni Cami 813, fols. 1v–2r (Courtesy of the Süleymaniye Library)



Fig. 3. The Sparrow hawk, Parrot, Nightingale, Owl, Pheasant, Weaverbird, and Snake hatcher. Qazwīnī, *ʿAjāʾib al-makhlūqāt wa-gharāʾib al-mawjūdāt*. Fars, 722 (1322). Istanbul, Süleymaniye Library, Yeni Cami 813, fols. 160v–161r (Courtesy of the Süleymaniye Library)

المصغر مسحوقا وكحل به وقع من حر العين ولو طلى به من جادج المزيك ان ايضا اذا شتمه يراف المزة يظن
به دخل المهرس يزول لها وكذلك وجع المفاصل معه خلط بالعل والاصبر ولجعل على الناحور
مربعين او ثلثه يصلها **عققة** طائر معروف في هذه النجابه يبرق الاشياء الغيبه كالخلق
والجواهر ويرمها في موضع آخر ولا يجد الوكر الا تحت شئ مرتفع او تحت عصف واما في ورق اللبلاب
تركه حول دكره ايلما بقصد الخفاص منها وفراخها وكثيرا ما يمسى منها وفراخها وعشها خاصيه اجراءه
قالوا دماغه خلط بالعالمة ويعطى بها صاحب اللقوه والاشغال فانه يعطش ويذهب ما به من دمه يحرق
في العلق ويخلط بها الورده ليقى انسانا



سقى ثريا زام كثيرا وطريقه يظن في الموضع
الذي فيه شوكا وعظم او فضل فانه يحرق بها
بالسوء له سمحه يطعم الصبي سقى فضيها
رشفه يحرق ويذهب ما به في حجره الصل

سرب عنها كلها ولا سقى واحد من منها يفتح من انشال العين ان اكتفى بها على الرق بعد الخروج من
الحمام بفعل ذلك ثلث مرات يذهب ذلك بالكلية



تختلف الفل والجاموس في الحظوظ الخفاء الفارة لا كسراته كان في قدم الزمان من الناس و
تأدى الناس من حمايه الى ان سلب نوما عروسا محليا ودعا عليه خنظل التي عليه السلام فذهب الله
به الى بعض حرار بحر المحيط تحت خط الاستوا لا يميل اليها اناس ومنها حيوانا كثيره كالقمل والكركد
والجاموس والبر وبيع المزارع والعتقار لانه يصيد منها لا نهضت طاعته واذا صادها ياكل
منها ويترك الباقي للحيوانات التي تحت طاعته ولا يصيد الا فيلا او حمارا عظيما او دشا واذا
نزع من اكله يبعد الى مكانه وعلى ابابه من الحيوانات التي تحت طاعته ويخرج على اكلها
وعند طيراه يسمع من حياضه صوت هجوم الليل او صوت الاشجار عند هبوب ريح العاصف و
ذكر وان على العتقار الف وسما به سمه وتراوح اذ انى عليه خمس ما به سمه فاذا حان وقته

Fig. 4. The Magpie and the 'anqā'. Qazwīnī, *ʿAjāʾib al-makhluqāt wa-gharāʾib al-mawjūdāt*. Fars, 722 (1322). Istanbul, Süleymaniye Library, Yeni Cami 813, fol. 166r (Courtesy of the Süleymaniye Library)



Fig. 5. The Horse. Qazwīnī, *ʿAjāʾib al-makhlūqāt wa-gharāʾib al-mawjūdāt*. Fars, ca. 1315–20. Gotha, Forschungs- und Landesbibliothek, fol. 92r (Courtesy of the Forschungs- und Landesbibliothek)



Fig. 6. The Horse. Qazwīnī, *‘Ajā’ib al-makhlūqāt wa-gharā’ib al-mawjūdāt*. Fars, 722 (1322). Istanbul, Süleymaniye Library, Yeni Cami 813, fol. 145v (Courtesy of the Süleymaniye Library)



Fig. 7. *Khusraw Dār* (a large tree), Castor oil plant, Willow, Peach, Spiny Cytiscus, Elm, and Plane. Qazwīnī, *Ajā'ib al-makhlūqāt wa-gharā'ib al-mawjūdāt*. Fars, 722 (1322). Istanbul, Süleymaniye Library, Yeni Cami 813, fols. 98v–99r (Courtesy of the Süleymaniye Library)



Fig. 8. Mercury. Qazwīnī, *ʿAjā'ib al-makhlūqāt wa-gharā'ib al-mawjūdāt*. Fars, 722 (1322). Istanbul, Süleymaniye Library, Yeni Cami 813, fol. 11v (Courtesy of the Süleymaniye Library)



Fig. 9. The *Tannin*. Qazwīnī, *ʿAjāʾib al-makhlūqāt wa-gharāʾib al-mawjūdāt*. Fars, 722 (1322). Istanbul, Süleymaniye Library, Yeni Cami 813, fol. 58r (Courtesy of the Süleymaniye Library)



Fig. 1. Tree and two graves. Fragment from a paper codex, 9th or 10th century. Vienna, Nationalbibliothek, Chart. Ar. 25612 (Courtesy of the Nationalbibliothek, Vienna)



Fig. 2. Islamic graves. al-Harīrī, *Maqāmāt*. Paris, Bibliothèque nationale de France, *arabe* 3929, fol. 26r
 (Courtesy of the Bibliothèque nationale de France)



Fig. 3. Islamic graves. al-Hariri, *Maqāmāt*. London, British Library, Or.1200, fol. 29v
 (Copyright of the British Library)



Fig. 4. Islamic graves. al-Ḥarīrī, *Maqāmāt*. London, British Library, Or. 9718, fol. 39r
(Copyright of the British Library)



Fig. 5. Islamic graves. al-Hariri, *Maqāmāt*. London, British Library, Add. 22,114, fol. 21r
(Copyright of the British Library)



Fig. 6. Graves. Badr al-Ḥunayn, Ḥijāz, Saudi Arabia (Photo by the author, April, 1987)



Fig. 7. Islamic *tābūt*. Sūq al-Khamīs, al-Baḥrayn (Photo by the author, October, 1973)



Fig. 8. Islamic graves. Wādī Ḥaḳīl, Ra's al-Khaimah, United Arab Emirates (Photo by the author, January, 1990)



Fig. 9. Jewish cemetery. al-Wuqayba, Suḥār, Sultanate of Oman (Photo by the author, 9th January, 2006)



Fig. 10. Jewish cemetery, al-Wuqayba, Suḥār, Sultanate of Oman (Photo by the author, 9th January, 2006)



Fig. 11. Jewish cemetery. al-Wuqayba, Suḥār, Sultanate of Oman (Photo by the author, 9th January, 2006)



Fig. 12. Jewish cemetery, al-Wuqayba, Suḥār, Sultanate of Oman (Photo by the author, 9th January, 2006)



Fig. 13. Wall at the Jewish cemetery, Suḥār, Sultanate of Oman (Photo by the author, 9th January, 2006)



Fig. 1. Bayād and the 'ajūz are debating the nobility (or lack thereof) of love. *Ḥadīth Bayād wa Riyād*, al-Andalus, early 13th century. Rome, Biblioteca Apostolica Vaticana, Vat. Ar. Ris. 368, fol. 2r (282 × 200 mm) (Courtesy of the Biblioteca Apostolica Vaticana)



Fig. 2. Bayād and the 'ajūz are debating the nobility (or lack thereof) of love. *Ḥadīth Bayād wa Rīyād*, al-Andalus, early 13th century. Rome, Biblioteca Apostolica Vaticana, Vat. Ar. Ris. 368, fol. 16r (282 × 200 mm) (Courtesy of the Biblioteca Apostolica Vaticana)



Fig. 3. Bayād receives another message from Riyāḍ through the mediation of three of the *Sayyida*'s slave girls. *Ḥadīth Bayād wa Riyāḍ*, al-Andalus, early 13th century. Rome, Biblioteca Apostolica Vaticana, Vat. Ar. Ris. 368, fol. 23r (282 × 200 mm) (Courtesy of the Biblioteca Apostolica Vaticana)



Fig. 4. Riyāḍ performs. *Hadith Bayāḍ wa Riyāḍ*, al-Andalus, early 13th century. Rome, Biblioteca Apostolica Vaticana, Vat. Ar. Ris. 368, fol. 10r (282 × 200 mm) (Courtesy of the Biblioteca Apostolica Vaticana)



Fig. 5. Bayād lying unconscious at the river. *Hadīth Bayād wa Riyād*, al-Andalus, early 13th century. Rome, Biblioteca Apostolica Vaticana, Vat. Ar. Ris. 368, fol. 20v (282 × 200 mm) (Courtesy of the Biblioteca Apostolica Vaticana)



Figs. 1a and b. Double frontispiece. al-Ḥarīrī, *Maqāmāt*, Baghdad, dated 634 (1237). Paris, Bibliothèque nationale de France, *arabe* 5847 (Schefer Ḥarīrī), fols. 1v–2r
(Copyright of the Bibliothèque nationale de France)



Fig. 2. Title page. al-Ḥarīrī, *Maqāmāt*, Baghdad, dated 634 (1237). Paris, Bibliothèque nationale de France, *arabe* 5847 (Schefer Ḥarīrī), fols. 1r (Copyright of the Bibliothèque nationale de France)



Fig. 3. Double frontispiece. Ibn al-Šūfī, *Risālat al-Šūfī fi'l-kawākib*, Baghdad or North Jazīra, ca. 1220–25. Tehran, Reza Abbasi Museum, M. 570, pp. 2–3 (Courtesy of the Reza Abbasi Museum, Tehran)



Figs. 4a and b. Double frontispiece. Dioscorides, *Hyūlā ʿilāj al-ṭibb*, North Jazira?, dated 626 (1229). Istanbul, TKS Ahmet III, 2127, fols. 1v-2r. (192 × 140 mm)
(Courtesy of the Topkapı Sarayı Museum, Istanbul)



Fig. 5. Frontispiece. Ibn Bakhtīshū, *Kitāb na't al-hayawān*, North Jazīra?, ca. 1220–25. London, British Library, Or. 2784, fol. 4r (Copyright of the British Library)



Fig. 6. Frontispiece. Pseudo-Galen, *Kitāb al-diryāq*, North Jazīra?, ca. 1250. Vienna, Nationalbibliothek, A.F. 10, fol. 1r. (320 × 255 mm) (Courtesy of the Nationalbibliothek, Vienna)



Fig. 7. Frontispiece. Dioscorides, *Hiyūlā 'ilāj al-ṭibb*, Oxford, Bodleian Library, Cod.or. d. 138, fol. 2v
(Courtesy of the Bodleian Library)



Fig. 8. Finispiece. Al-Mubashshir, *Mukhtār al-ḥikam wa maḥāsin al-kalim*, Syria?, early 13th century. Istanbul TKS, Ahmet III, 3206, fol. 173v. (250 × 142 mm) (Courtesy of the Topkapı Sarayı Museum, Istanbul)



Fig. 1. The Perils of Life. Ibn al-Muqaffa', *Kalila and Dimna*, Egypt or Syria, dated 755 (1354). Oxford, the Bodleian Library, Pococke 400, fol. 36v (Courtesy of the Bodleian Library)



Fig. 2. Dimna Tells Kalila the Metaphor of the Trompe l'Oeil Painter. Ibn al-Muqaffa', *Kalila and Dimna*, Egypt or Syria, ca. 1340–50. Munich, Staatsbibliothek, cod. ar. 616, fol. 44v (Courtesy of the Staatsbibliothek, Munich)



Fig. 3. Dimna Tells Kalila the Metaphor of the Trompe l'Oeil Painter. Ibn al-Muqaffa, *Kalila and Dimna*, Egypt or Syria, dated 755 (1354). Oxford, Bodleian Library, Pococke 400, fol. 40v (Courtesy of the Bodleian Library)



Fig. 4. The Trompe l'Oeil Painter. Naṣr Allāh, *Kalīla and Dimna*, Baghdad?, ca. 1260–85. Istanbul, Topkapı Saray Library, H. 363, fol. 41r (Courtesy of the Topkapı Saray Library)



Figs. 5, 6. Image of the King of the Hares, the Hares Around Him, While He Talks to Them. Ibn al-Muqaffa', *Kalila and Dimna*, Egypt or Syria, dated 755 (1354). Oxford, Bodleian Library, Pococke 400, fols. 97v–98r (Courtesy of the Bodleian Library)



Fig. 7. Image of the Ascetic and the Dead Weasel and the Infant in the Crib and the Dismembered Snake. Ibn al-Muqaffa', *Kalila and Dimna*, Egypt or Syria, dated 755 (1354). Oxford, Bodleian Library, Pococke 400, fol. 117r. (Courtesy of the Bodleian Library)

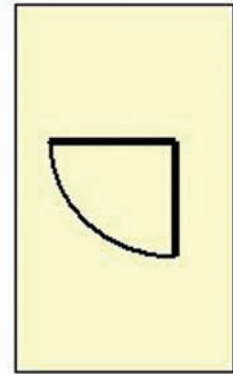


Fig. 1. The eye. Abū Zakariyā' Yahyā ibn Abī al-Rajā' (sometimes referred to as Ṣalāḥ al-Dīn ibn Yūsuf al-Kaḥḥāl al-Ḥamawī), *Kūlāb nūr al-'uyūn wa-jāmi'* *al-funūn*, Dublin, Chester Beatty Library, Arabic MS 4921, fol. 8r (Reproduced by permission of the Chester Beatty Library)

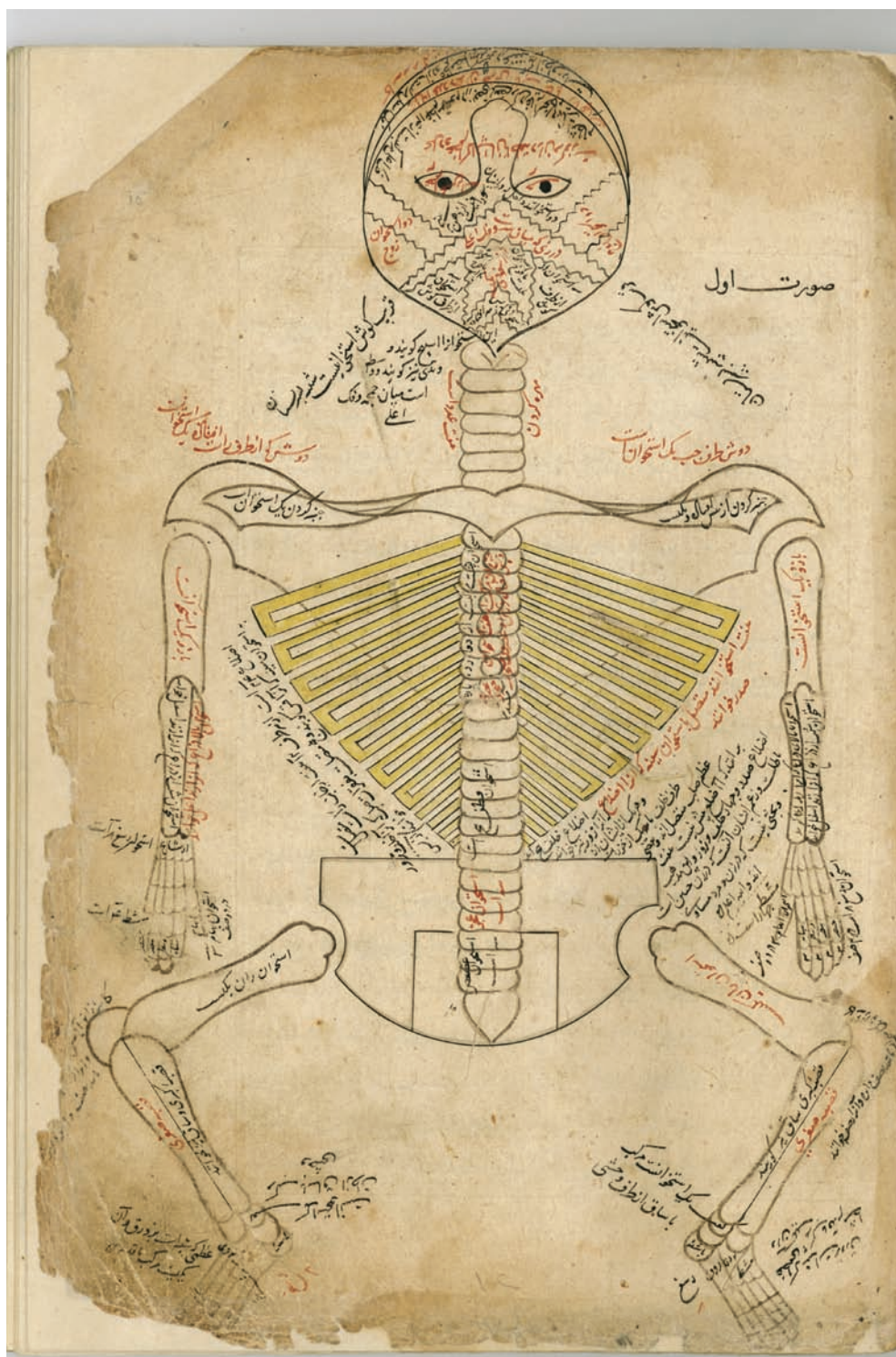


Fig. 2. The skeleton. Maṣṣūr ibn Ilyās, *Tashrīḥ-i Maṣṣūrī* (undated, c. 1450). London, Khalili Collection of Islamic Art, MSS 387, fol. 10r (Reproduced by permission of the Nasser D. Khalili Collection of Islamic Art)

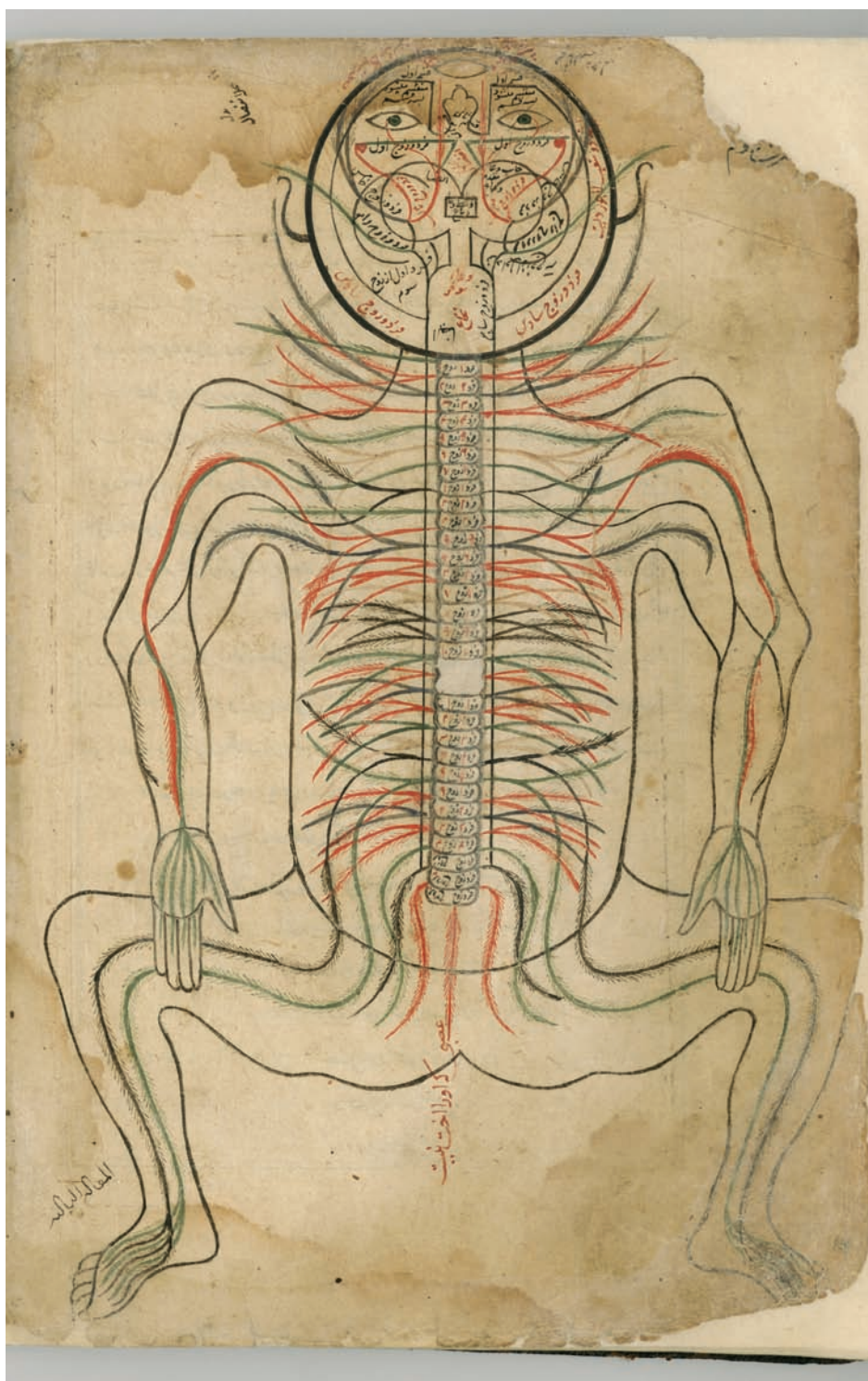


Fig. 3. The nerve figure. Maṣṣūr ibn Ilyās, *Tashrīḥ-i Maṣṣūrī* (undated, c. 1450). London, Khalili Collection of Islamic Art, MSS 387, fol. 14v (Reproduced by permission of the Nasser D. Khalili Collection of Islamic Art)

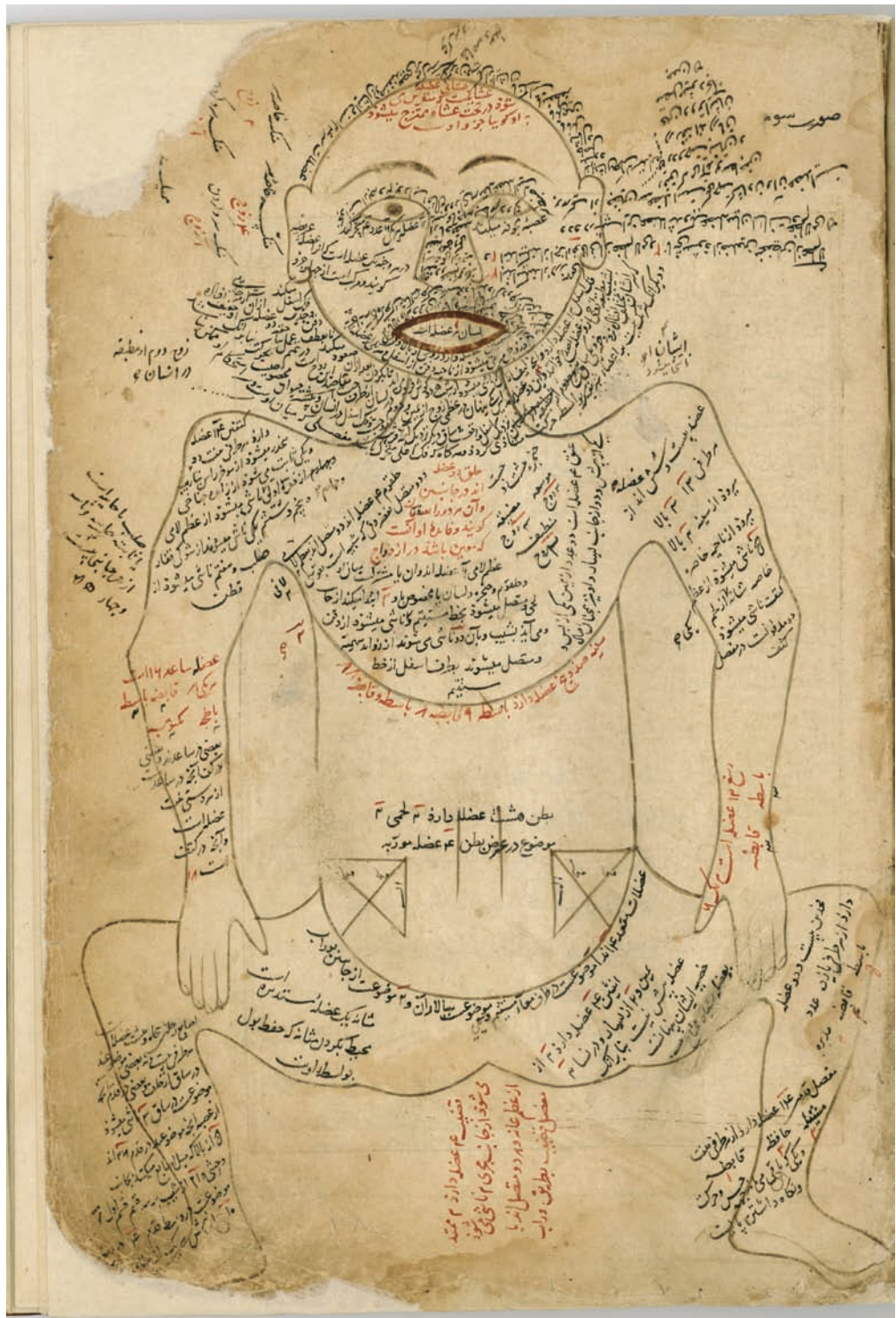


Fig. 4. The muscle figure. Maṣṣūr ibn Ilyās, *Tashrīḥ-i Maṣṣūrī* (undated, c. 1450). London, Khalili Collection of Islamic Art, MSS 387, fol. 16r (Reproduced by permission of the Nasser D. Khalili Collection of Islamic Art)

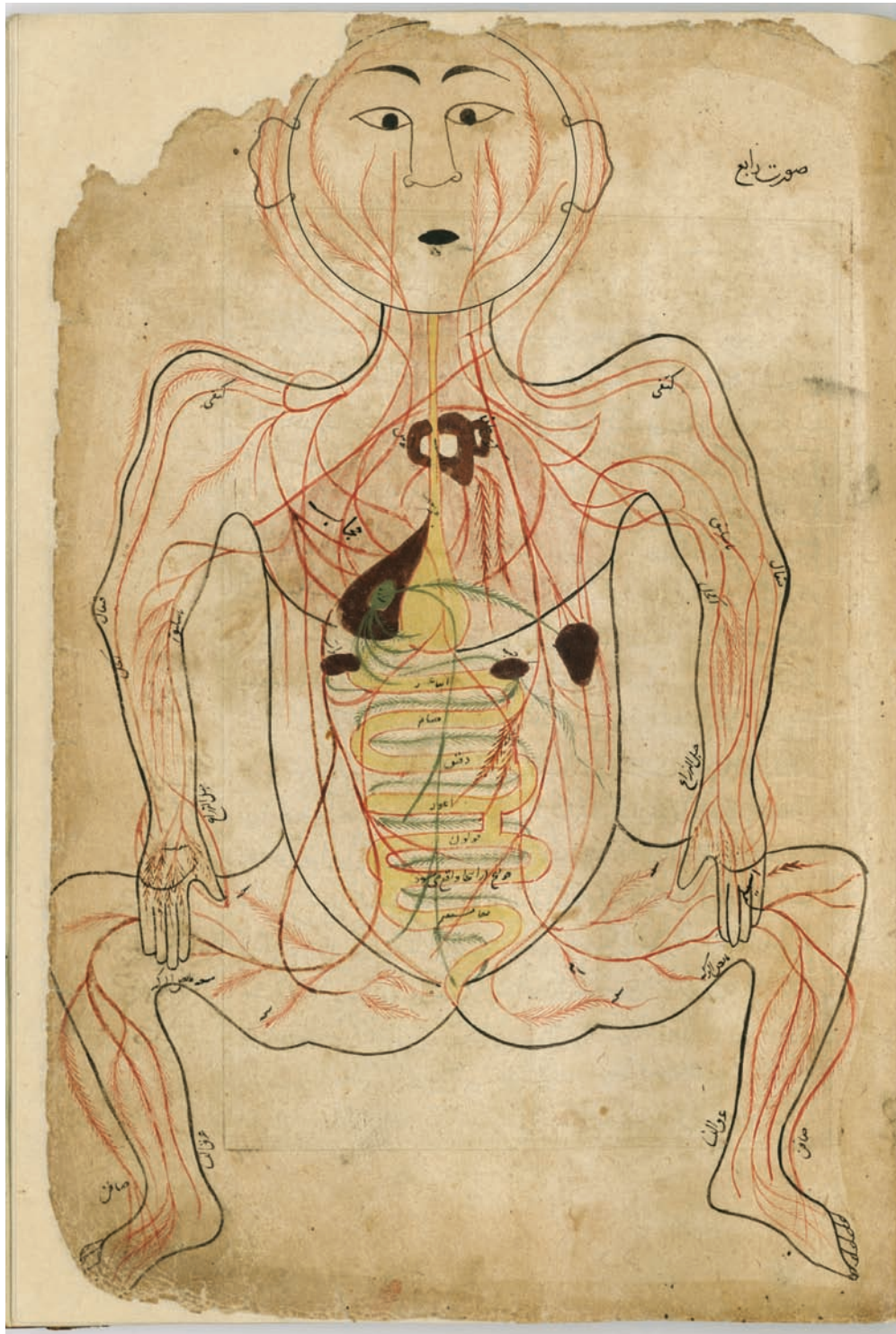


Fig. 5. The venous figure. Manṣūr ibn Ilyās, *Taṣhrīḥ-i Manṣūrī* (undated, c. 1450). London, Khalili Collection of Islamic Art, MSS 387, fol. 20r (Reproduced by permission of the Nasser D. Khalili Collection of Islamic Art)

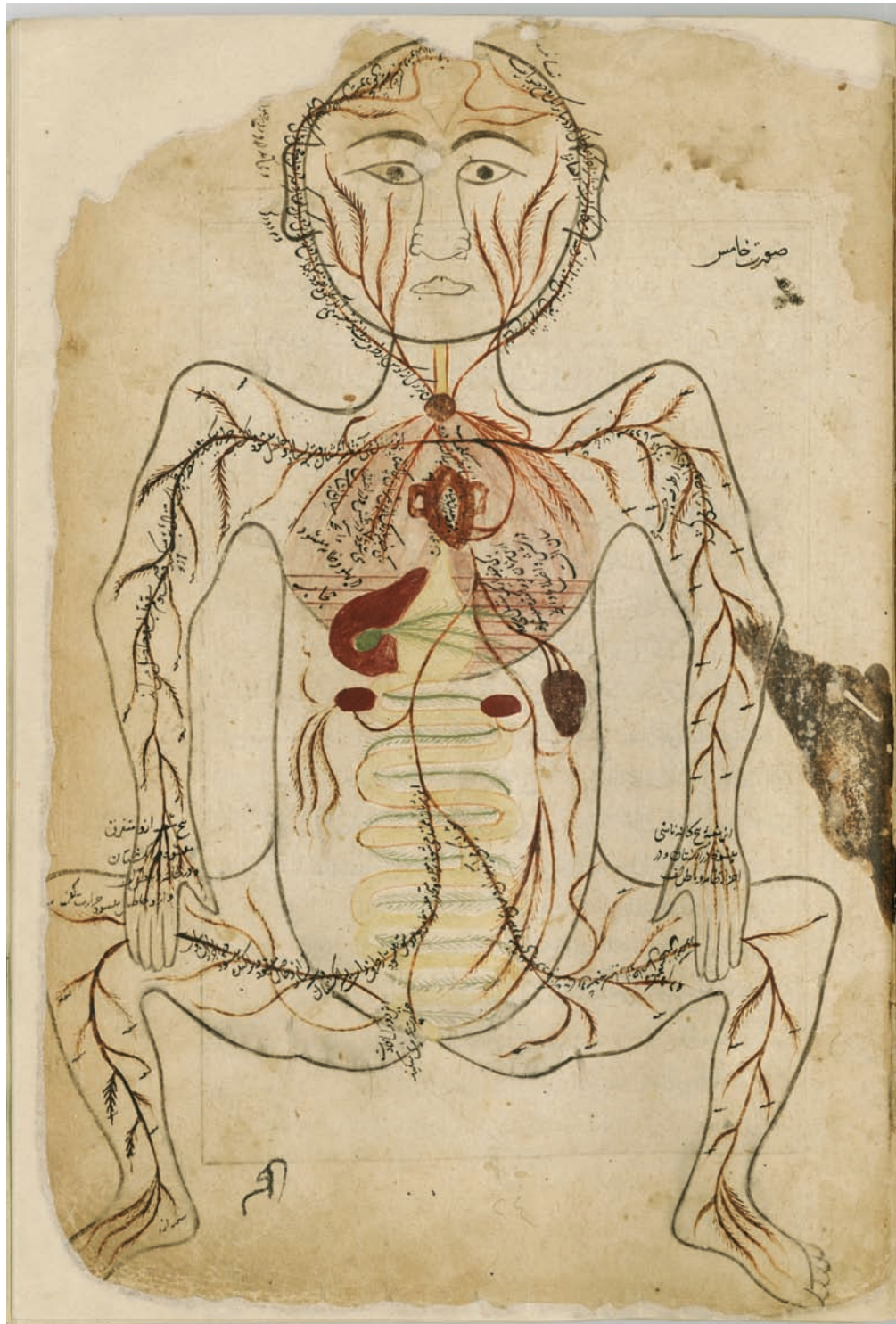


Fig. 6. The arterial figures. Maṣṣūr ibn Ilyās, *Tashrīḥ-i Maṣṣūrī* (undated, c. 1450). London, Khalili Collection of Islamic Art, MSS 387, fol. 22r (Reproduced by permission of the Nasser D. Khalili Collection of Islamic Art)

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